This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

LANE MEDICAL LIBRARY STANFORD
L81 .K33 1884 STOR
The doctor at home : illustrated. Treatl
24503438029

doctor at home.

Kendall, B. J. & Co.

L81
K33
1884

LANE

MEDICAL LIBRARY

LEVI COOPER LANE FUND

THE DOCTOR AT HOME.

PUBLISHED BY

DR. B. J. KENDALL & CO.

ENOSBURGH FALLS, VT.

U.S.A.

PRICE 25 CENTS

PUBLISHERS' ANNOUNCEMENT.

We begin the publication of this book with a feeling of great satisfaction, for the reason that we feel assured that we are supplying one of the greatest lacks in every household, by placing therein a work so plain and simple in its language that the most ignorant will have no difficulty in understanding it, and so complete as to enable every family to treat its members intelligibly in all varieties of sickness, except those cases which are so grave as to require the close watch of an intelligent and experienced physician.

It has been our aim to give our patrons more practical knowledge, in a condensed form, in this little work, than can be found in any other work published for the common people.

The treatment in all cases can be relied upon as the very best; but owing to the limited space we have, we omit the numerous remedies recommended by many, and have only given a few of the best for each disease. We also give some of the most choice receipts for various diseases which have ever been discovered; a large share of which have never been given to the public before, and would not be at this time only for the reason that we are determined to spare no pains to make this the best and most complete book of its kind ever published and offered for sale for the low price at which this is placed.

In order to give our readers a large amount of valuable information for a small sum of money, this book is printed with small type compactly set, and contains more matter that is really valuable than is usually found in books set in large type, which cost from five to ten dollars, or more.

Thousands take the liberty to write to us, asking us questions which they could easily answer for themselves if they would take the trouble to consult this book freely. To all such we would say, please do not write to us about matters of this kind, for two reasons: first, our time is so valuable and so completely occupied that it is impossible for us to give all such letters sufficient time to make the reply always of service to you; second, if you cannot find all the information you desire by carefully studying this book, your case is probably one which should have the attention of some intelligent physician.

Part Second is devoted to the diseases of the horse and their treatment, with valuable receipts, and much other valuable information. It is finely illustrated.

Copyright, 1882, by Dr. B. J. KENDALL & CO.,
Enosburgh Falls, Vermont.

All rights reserved.

THIS WILL INTEREST YOU.

PLEASE READ.

Enosburgh Falls, Vt., June 17, 1885.

Dear Sir:—

We have concluded to distribute among a few druggists in your State, a limited number of copies of our new work "The Doctor at Home" for gratuitous distribution

you will kindly advise us by return mail, about how many copies you can use to advantage, and send us a card or label giving your name and business we will print the same, with your compliments on the cover of the book. These books will be sent by express, charges prepaid when they can be. In case we can not prepay through, please pay charges and send us bill and we will remit by return mail. All packages prepaid will be so marked. As this book has real merit and would be valuable in any household in case of sickness we trust you will use great care in placing them where they will be appreciated. It is in no sense an Almanac or cheap advertisement but something that will recommend itself. In order that you may judge accurately in regard to its virtue we herewith send you a copy. Please read the same carefully. Awaiting your reply we beg to remain,

Respectfully,

Dr. B. J. Kendall Company.

THE

DOCTOR AT HOME.

Illustrated.

TREATING THE DISEASES

OF

MAN AND THE HORSE.

A practical hand-book for the non-professional. Written in plain, simple language so as to be easily understood by the common people. It treats all of the common diseases of the human family, and gives a large number of excellent receipts and favorite prescriptions for various diseases, with engravings to illustrate many points of interest. Also, an Essay on Hygiene, a Table of Doses, with proportional doses for children; and, in Part Second, the Diseases of the Horse are plainly treated, with the plainest and best treatment that can be given under most circumstances; and a Table of Doses for the Horse, a Table showing the Age of the Horse, a large number of excellent receipts for the Horse, and a large amount of other valuable information.

BY

DR. B. J. KENDALL CO.,

ENOSBURGH FALLS, VT., U.S.A.,

AUTHORS OF

"A TREATISE ON THE HORSE AND HIS DISEASES."

PRINTED AT STEAM PRINTING HOUSE OF DR. B. J. KENDALL CO.

ENOSBURGH FALLS, VT.

1884.

PANL LIBRARY

PREFACE.

THE great lack of knowledge respecting the laws which govern our physical organization is, directly or indirectly, the cause of much suffering to humanity. And the great lack of knowledge of the means to restore perverted nature to its normal and healthful condition is yet another deficiency which is found in nearly every household; for these reasons we believe that our efforts to enlighten our fellow-man upon these subjects will be appreciated by all who purchase and read carefully the following pages.

It will be our aim in writing this book to teach our patrons particularly how to prevent as well as to cure disease, because we are firm believers in the old adage, "An ounce of prevention is better than a pound of cure." The remedies we recommend will be found to be the very best which can be given in the different diseases for which they are recommended, avoiding as much as possible recommending treatment which is doubtful, or in giving it to our readers in a blind or impracticable way. It will be one of our greatest aims to avoid technical terms as much as possible, so that every person will have no difficulty in understanding it readily.

As this work is intended particularly for the common people, as well as for professional men, we condense it as much as possible by only giving such information as is of the greatest importance relative to each subject, and by giving the best treatment for the largest majority of cases; and, as it would be impracticable in a work like this to give all the various remedies which have ever been used with success, we simply say to our patrons,—you can rely on the treatment we give in nearly every case; but as complications arise in many cases which it would be impossible for us to apprehend here, we recommend our patrons, if at any time the treatment we give here should not prove as satisfactory as you might wish, to investigate farther, as the difficulty may be different than you would at first suppose, and thus require different treatment; but if, after carefully studying the case, you should be unable to treat it successfully, then we would advise you to call a regular practising physician, who would be more likely to decide correctly as to the nature of the disease; but, as physicians are all human and do not all inherit a good judgment, we advise our readers to carefully study their case, and while you might find it necessary to rely upon him to tell you what the disease might be, yet it might be at times quite important that you should know much about the proper method of treating the case, and many times quite as important that you be informed, that you may be able to nurse your sick friends intelligently, and thus be of the greatest possible help to your physician in very bad cases. We would not, under any circumstances, depreciate the practising physician, as no class of professional men are doing so much for suffering humanity; and, as a rule, they stand as ready to relieve the poor when there is no prospect of remuneration, as to assist the rich; but, in spite of all this, we do believe that there are hundreds of men practising medicine who do not possess the good judgment which a physician needs above all men; and, for these reasons, no person can obtain too much knowledge of diseases and the best methods of treating them.

As it would be very difficult to make plain to those not having had a medical education, some diseases of a malignant character, as well as a few which are very difficult even for physicians to distinguish, we shall not attempt to treat them at all, but recommend our patrons to consult a regular physician when you cannot find the information you desire by searching the pages of this book thoroughly.

For certain reasons we shall not treat diseases of a private nature in this work, nor will we insert anything which should exclude it from the most refined family; but, on the contrary, it should be read by everybody, as it gives information which is important to maintain health and happiness.

As most men in this country are owners of one or more horses, we devote a portion of this work to diseases of this noble animal, and we believe that the chapter on these diseases should be read by all, as it teaches humane principles, and has a tendency to elevate the morals by remipding all that "*a merciful man is merciful to his beast.*"

K33
1884

CONTENTS.

PART FIRST.

DISEASES OF THE HUMAN FAMILY.

Acidity of the Stomach . . 6
Ague 6
Ague-Cake 7
Anemia 7
Apoplexy 7
Asthma . . . . . 8 & 36
Alterative 42
Baby's Sore Mouth . . . 8
Bee Sting, Bites, etc. . . 8
Bleeding from the Lungs . 9
Bleeding from the Nose . 9
Bleeding from the Stomach 9
Bleeding from the Urinary Organs 9
Boils 9
Bronchocele 22
Big Neck 22
Bronchitis 9
Bruises 10
Bright's Disease 36
Bunions 10
Blood Poisoning 36
Burns and Scalds 10
Barber's Itch 36
Callous 10
Canker-rash 27
Carbuncle 10
Catarrh 11
Chicken Pox 11
Chilblains 12
Children, Sickness of . . 12
Cholera 12
Cholera Infantum 13
Canker Sore Throat . . . 36
Cathartic Injection . . . 36
Cathartics 42
Cholera Morbus 13
Cólic 14
Constipation 14
Consumption 14
Convulsions of Children . 15
Coughs, Colds, or Bronchitis 37
Corns 15
Cough Mixtures 37
Croup . . . . . 15 & 37
Chafing 37
Curvature of the Spine . . 16
Clergyman's Sore Throat . 37
Debility 16
Dandruff 37
Diarrhœa . . . . . 16 & 37
Diabetes 37
Diphtheria . . . . . 16 & 38
Deficiency of Blood . . . 37
Diseases of the Heart . . 17
Dropsy 38
Dropsy of the Brain . . . 18
Dysentery 18
Dyspepsia 19
Diuretics 42
Doses for an Average Size Man 5
Disinfectants 42
Epilepsy 19
Ear-ache 38
Erysipelas 20
Eye-water 38
Emetic 42
Felon . . . . . 21 & 38
Favorite Prescriptions . . 42
Fevers 21
Farcy in Man 38
Frost Bite 21
Fainting 38
Falling Sickness 19
Green Sickness 38
Gall Stones 21
Gravel 38
Gout 38
Goitre 22
Glanders in Man 38
Gargles 43
Hooping Cough 22
Headache 39
Hydrophobia 23
Hay Asthma 39
Hay Fever, or Summer Catarrh 39
Herpes 39
Hiccup 39
Hiccough 39
Hip Disease 39
Hives 39
How to Get Rid of Bed-Bugs 39
How to Get Rid of Rats . 39
Hair Restorative 39
Heartburn 39
Hygiene 32
Influenza 23
Impure Blood 39
Intermittent Fever . . . 6
Itch 39
Jaundice 23
Kendall's Spavin Cure . . 47
Kendall's Persian Pills . . 96
Lameness 23
Lame Back 24
Lame Joints 24
Liver Complaints 24
Lumbago 25
Measles 25
Mumps 25
Nursing Sore Mouth . . . 40
Neuralgia 25
Night Sweats 40
Ointments 43
Pain in the Back 26
Pills 43
Persian Pills 96
Prurigo 40
Pain 26
Proud Flesh 40
Proportional Doses for Children 5
Piles 40
Quinsy 26
Rats 40
Ring-worm 40
Rheumatism 26
Receipts 36–43
Refining our Medicine . . 43
Scarlet Fever 27
Sciatica 29
Scrofula 29
Small Pox 29
Sore Throat 30
Sprains 30
Stiff Joints 30
Shingles 40
Swelling of the Knee-joint 31
St. Anthony's Fire . . . 20
Swelled Neck 22
Scald Head 40
Sea Baths 40
Sick Headache 40
Snake Bite 40
Sores and Ulcers 41
Sour Stomach 41
St. Vitus's Dance 41
Salve 43
Strengthening Plasters . . 43
Sleeplessness 41
Tonics 43
Toothache Drops 41
Testimonials . . . 45 & 81
Tooth Powder 41
Typhoid Fever 31
Toothache . . . . 32 & 41
Tape Worm 41
Thrush 8
Tetter 41
Ulcers 41
Ulcers of the Mouth . . . 41
Weak Back and Spine . . 32
Warts 32
Wounds 32
Whisker Dye 41
Whitlow, or Felon . . . 41
Worm Lozenges 43

73653

rget in Cows.
Potass. Iodide, 15 grains
" Nitrate, 1 dram.
Give in meal.

CONTENTS.

PART SECOND.

DISEASES OF THE HORSE.

Astringent Cordial . . . 74
Abdominal Dropsy . . . 48
Atrophy 69
Age of the Horse 73
Alterative and Laxative Balls 74
Anodyne Drenches . . . 74
Abscess of the Lungs . . 63
Bog Spavin 68
Bone Spavin. 67
Bowels, Inflammation of . 49
Bots 48
Breeding 93
Bronchitis 50
Baldness 66
Burns and Scalds 50
Brittle and Contracted Hoofs 74
Bruises, Cuts, etc., on Horse and Man 74
Calins 50
Capped Elbow 50
Capped Hock 50
Capped Knee 50
Condition Powders 75
Cautery 50
Chronic Founder 57
Chronic Rheumatism . . 64
Colic . . . . . 51 & 74
Corns 52
Cough . . . . . 53 & 75
Cuts, Wounds, and Sores . 75
Crib-Biting 53
Cracked Heels 75
Curb 53
Cordial Balls 75
Contracted Hoof or Sore Feet. 75
Cough Mixtures 75
Debility 54
Diabetes 75
Deformities in Young Colts 54
Diuretics 75
Diuretic Balls 75
Diarrhœa 54
Diuretic and Tonic Balls . 75
Dysentery, Acute 54
Doses for the Horse . . . 71
Distemper . . . . . 55 & 75
Epizootic 55
Eye-Water 76
Farcy . . . . . 55 & 76
Farcy and Glanders . . . 76
Firing . . . . . 50 & 56
Firing Horses 56
Foot Diseases 56
Founder 56
Fracture 57
Frost-Bites 58
Favorite Receipts for the Horse 74
Flatulent Colic 52
Flesh Wounds 76
Fever Balls 76
Glanders 58
Grease-heels. . . . . 58 & 76
Heaves. . . . . 59 & 76
Hide-bound 59
Hints on Food 59
Hip-joint Lameness . . . 60
Healing Mixture 76
Horse Liniments 77
Inflammation of Stomach . 60
Influenza 60
Interfering 61
In Measuring Liquids . . 73
Inflammation of Bladder . 61
Inflammation of Kidneys . 61
Kidneys, Disease of . . . 61
Lameness. 62
Lampers 62
Lampass 62
Lungs, Diseases of . . . 62
Lung Fever 62
Laminitis 56
Lumbrici 71
Mange 66
Mange, Itch, etc. 66
Nasal Gleet . . . . 63 & 77
Navicular Disease 64
Occult Spavin 68
Our Experience with Bone Spavin 80
On Human Flesh . . 45 & 81
Ointment for Horses. . . 77
Pneumonia 62
Prof. Flint's Renovating Powders 95
Proud Flesh 64
Pink-Eye 62
Pleurisy 63
Poll Evil and Fistula . 64 & 77
Poll Evil . . . . . 64 & 77
Pin Worms 71
Quittor . . . . . 64 & 77
Quarter Crack 77
Rheumatism 64
Ring-bone 64
Ring-worm 77
Saddle Galls . . . . 65 & 77
Saddle and Harness Galls, Bruises, etc.. . . . 65 & 77
Scratches . . . . . 65 & 75
Scratchers and Grease-heel 78
Shoe Boil 50
Shoeing Horses 91
Shoulder Lameness . . . 65
Shoulder-joint Lameness . 65
Sores . . . . . 66 & 78
Spavin 67
Splint 68
Sprains . . . . . 68 & 78
Sprung Knees 68
Staggers 69
Stifle-joint Lameness . . 69
Sweeney . . . . . 69 & 78
Strangles 55
Sore Lips. 78
Sore Mouth and Lips . . 78
Side-bones 66
Skin Diseases 66
Tape Worm 70
Thoroughpin 69
Tenia 70
Tumors 69
Thrush 78
Tonic Balls 78
To Grow Hair 78
To Horse Owners 79
Unhealthy Ulcers 78
Water Farcy 78
Wind Galls 70
Worms . . . . . 70 & 78
Yellow Waters 71

PROPORTIONAL DOSES FOR CHILDREN.

It should be *remembered* that in all cases in this book, where the age is not mentioned for which any given dose is recommended, that it is intended that the dose is the amount which would be proper for an average-sized man; and that delicate females require only from half to three-fourths that amount, while for children it should be regulated according to the age.

For a child under one year of age, only one-twelfth the dose recommended for a man will be required; under two years, only one-eighth; under three years, one-sixth; under four years, one-fourth; under eight years, one-third; under fourteen years, one-half; under eighteen years, three-fourths. Above twenty-one years the full dose may be given, and above sixty-five years the dose should be gradually diminished. Children should have a smaller proportional dose of opium in any form; but they will bear larger proportional doses of castor oil or of mercury. Therefore, study to know how to give the proper remedy, in the proper quantity, at the proper time, with proper hygienic measures.

DOSES FOR AN AVERAGE-SIZED MAN.

NAME OF DRUG.	DOSE.	NAME OF DRUG.	DOSE.
Aloes	3 to 15 grains.	Syrup of Sarsaparilla	1 to 4 teaspoonfuls.
Anise Oil	5 to 15 drops.	" Seneka	1 to 2 teaspoonfuls.
Aqua Ammonia (in water)	10 to 30 drops.	" Rhubarb	1 to 2 teaspoonfuls.
Balsam Copaiba	10 to 40 drops.	Tannic Acid	1 to 5 grains.
Balsam of Fir	3 to 10 drops.	Tincture of Aconite Root	1 to 5 drops.
Bismuth	5 to 40 grains.	" Aloes	1 to 8 teaspoonfuls.
Bromide of Potassium	5 to 40 grains.	" Assafœtida	½ to 1 teaspoonful.
Buchu Leaves	20 to 40 grains.	" Belladonna	10 to 30 drops.
Calomel (as an alterative)	$\frac{1}{12}$ to 1 grain.	" Bloodroot	¼ to ½ teaspoonful.
Castor Oil	1 to 8 teaspoonfuls.	" Columbo	1 to 2 teaspoonfuls.
Citrate of Iron	2 to 5 grains.	" Camphor	5 to 60 drops.
Citrate of Iron & Quinine	3 to 8 grains.	" Cayenne	10 to 60 drops.
Cream of Tartar	½ to 3 teaspoonfuls.	" Castor	½ to 1 teaspoonful.
Dover's Powder	5 to 10 grains.	" Catechu	½ to 2 teaspoonfuls.
Elecampane	20 to 60 grains.	" Cinchona Comp.	½ to 4 teaspoonfuls.
Epsom Salts	½ to 1 ounce.	" Colchicum	15 to 60 drops.
Gallic Acid	5 to 10 grains.	" Digitalis	5 to 20 drops.
Iodide of Potassium	2 to 10 grains.	" Ginger	½ to 1 teaspoonful.
Kino	10 to 30 grains.	" Gentian Comp.	½ to 2 teaspoonfuls.
Mandrake	5 to 20 grains.	" Guaiac	½ to 1 teaspoonful.
Mercury with Chalk	2 to 8 grains.	" Kino	½ to 2 teaspoonfuls.
Morphine	⅛ to ¼ grain.	" Lobelia	½ to 1 teaspoonful.
Muriate of Ammonia	5 to 20 grains.	" Muriate of Iron	10 to 30 drops.
Opium	½ to 2 grains.	" Myrrh	½ to 1 teaspoonful.
Paregoric	1 teaspoonful.	" Nux Vomica	5 to 10 drops.
Peppermint Essence	5 to 30 drops.	" Opium (Laudanum)	10 to 25 drops.
Pepsin	1 to 5 grains.	" Rhubarb	1 to 4 teaspoonfuls.
Quinine	1 to 10 grains.	" " & Senna	1 to 4 teaspoonfuls.
Rochelle Salts	½ to 1 ounce.	" Tolu	½ to 1 teaspoonful.
Rhubarb	5 to 30 grains.	" Valerian	½ to 2 teaspoonfuls.
Saltpetre	5 to 20 grains.	Turpentine	10 to 40 drops.
Santonin	2 to 5 grains.	Wine of Ipecac (Diaph.)	10 to 30 drops.
Syrup of Squills	½ to 1 teaspoonful.	" " (Emetic.)	2 to 8 teaspoonfuls.
" Iodide of Iron	15 to 30 drops.	" Colchicum Root	10 to 30 drops.
" Senna	1 to 6 teaspoonfuls.		

PART I.

DISEASES OF THE HUMAN FAMILY.

ACIDITY OF THE STOMACH (Heartburn).—This accompanies dyspepsia or indigestion frequently, and is caused many times from a neglect to take sufficient exercise in the open air, or from an inordinate use of spirituous liquors or tobacco.

Treatment.—If caused by the use of liquor or tobacco, break off the destructive habit. Temporary relief may be obtained by the use of half a teaspoonful of saleratus, dissolved in half a glass of water; but the use of this remedy should not be continued, as it would be very injurious to the stomach, and should only be used to procure relief in the absence of magnesia, which is a much better remedy, and can be taken in quantities of one or two teaspoonfuls in a glass of cold water.

The diet should be plain, nourishing, and such as will be easily digested, avoiding sweet food or such vegetables as turn sour in the stomach; and always avoid overloading the stomach. Take daily exercise in the open air. (For further information, see DYSPEPSIA.)

AGUE (Intermittent Fever).—This disease is generally known as "fever and ague," "chill fever," "the shakes," and in some localities it is known as "swamp fever," etc. This is a periodic fever, and is chiefly due to an infectious effluvia from decayed animal or vegetable matter,—usually the latter,—and commonly known as malaria. It occurs in districts where the surrounding country abounds in low swamps which are covered with brushwood and high grass, and is most common in the season following the cessation of the rains, while the ground is drying rapidly from the high temperature. It is more virulent in low situations than in high, and in hot climates than in temperate. It should be remembered that malarious districts are most dangerous at night, and that this effluvia lies low, which makes it quite important to occupy an upper room, especially for a sleeping room, and to avoid being out in the evening if you would be particular to avoid an attack of this disease.

It is far more liable to attack persons who are feeble from any cause,—exhausted by fatigue, travelling, mental depression, improper or insufficient diet, intemperance, exposure to night air, and those who have previously suffered from it.

Exposure to malaria produces in different persons a different disease, according to the constitutional predisposition of the individual. That which will produce ague in one person may give rise to dysentery or remittent fever in another; and yet perhaps in another case it may remain latent in the system for some weeks, or even months. It is quite important to remember the above facts, so as to be the better able to come to a correct conclusion in obscure cases, where the ague-fit is not well developed.

There are three species of ague, and known by physicians as: Quotidian, if the fit return every day at the same hour, generally in the morning, and lasts about ten or twelve hours; the Tertian, which comes on every other day, generally about noon, and lasts until evening, and is the most common in this country; the Quartan comes on once in three days, usually in the afternoon. By the above it will be seen that the interval or time between the commencement of one paroxysm and the beginning of the next, in the first species, is twenty-four hours; in the second, forty-eight; in the third, seventy-two. The first is most common in Spring; the second, in the Spring and Fall; the third, in the Fall.

Symptoms.—The disease may set in suddenly; or may come on gradually with a feeling of general illness, which increases until it culminates in a regular ague-fit after a few days.

An ague-fit consists of three stages:—

1st. *The cold stage.*—This begins with feelings of chilliness and coldness in the back and extremities, weakness, the skin is rough, the nails are blue, there are violent shiverings, and chattering of the teeth, headache, backache, quick, small pulse, a feeling of oppression or tightness over the region of the stomach. After these symptoms have lasted from half an hour to three or four hours, the cold stage is gradually succeeded by the hot stage.

2d. *The hot stage.*—After the cold stage passes off comes reaction, and the surface of the body then becomes very hot and dry, the face flushed, the pulse full and frequent, the mouth parched, excessive thirst, fulness in the head, great restlessness, and sometimes delirium. This stage rarely continues less than three hours or more than ten or twelve hours, and then comes

3d. *The sweating stage.*—This stage commences with a gentle moisture, which begins on the forehead and breast, and gradually increases until it extends over the whole body; and the headache, heat of skin, and thirst abate, and the pulse and breathing become natural, so that in uncomplicated cases the patient feels well, but weak, till the return of the same symptoms, which will return at the same hour.

Complications are liable to arise in protracted cases.

Treatment.—When residing in a malarious district, persons should always take the following precaution to prevent an attack of ague:—choose an upper room to sleep in at night; avoid exposure, particularly at night; have warm clothing, good diet, and a due amount of repose.

In treating most cases it is best to give a dose of the Persian pills, described on page 96, in the start, to clear the bowels; and they should be used regularly, if necessary, in a sufficient number to keep the bowels in a healthy condition.

In the *cold stage* care should be taken to produce artificial warmth by bathing the legs and feet in water as warm as can be borne; cover the body well with warm flannel blankets, and after the legs and feet have been wiped dry, cover them well in warm flannels, and place hot sand bags around the feet, legs, stomach and bowels, and also at the back. Warm drinks should be given freely, such as ginger or weak red pepper tea. A grain of opium, or twenty-five drops of tincture of opium given to an adult just before the cold stage, often proves beneficial.

In the *hot stage* an opposite plan should be pursued; cooling drinks then being required, and the unnecessary clothing should be removed gradually.

In the *sweating stage* the action of the skin should be encouraged by tepid drinks, and, as soon as the sweating is over, should be wiped dry with a warm flannel, the clothing changed, being particular to have all clothing put on to the patient dry and warm; and after this sleep may be permitted.

After the sweating stage has passed is the time which should be relied upon for the giving of remedies to break up the ague.

The remedy which is most relied upon for breaking up this disease is *sulphate of quinine*, of which from two to four grains should be given in a little water with two to four drops of diluted sulphuric acid, every four hours during the intermission, beginning at once after the sweating stage has subsided, and stopping its use when the fit returns, and then treat each stage again as recommended above, and continue with the quinine again after the fit has passed. Always give of the quinine, after the cure seems to be effected, five to ten grains daily, and gradually decreasing the quantity for ten to twenty days, as the disease is apt to return on the seventh, fourteenth, or twenty-first day after the attack.

If for any reason the quinine cannot be procured or cannot be taken, the following remedies can be tried:—Salicine (made from willow bark), or any of the vegetable bitters.

When the disease becomes of a chronic nature a change of climate is necessary to effect a complete cure.

Sulphate of quinine is to be relied upon as the best remedy which can be used for this disease, and is given by some in larger doses, say ten or fifteen grains at one dose, as soon as possible after the sweating stage has passed. Five or six drops of diluted sulphuric acid given with the quinine in a little water causes it to dissolve more readily. When the quinine causes a "ringing of the ears," it is an indication that a sufficient quantity has been taken for the time being. It is quite important that the Persian pills should be taken whenever it is necessary, as they are particularly well adapted to cases of this kind, as well as for all cases where a good physic is needed; and we feel confident that no pills yet discovered equals them for family use. See description on page 96.

AGUE-CAKE.—This is an enlargement of the spleen, the effect of protracted ague.

ANEMIA.—This is a deficiency or poverty of blood, and caused by loss of blood from any cause, or from a deprivation of the proper materials necessary for the formation of healthy blood on account of improper digestion, or from other unavoidable causes. The person afflicted with anemia is pale, and the lips, tongue, and inside of the mouth have a bleached appearance, and the skin has a waxy appearance. The temperature is below the normal standard.

Treatment.—The principal treatment should be to palliate any bad symptoms that might occur; give iron in some form to enrich the blood. Citrate of iron one-fourth ounce, water four ounces, brandy or whiskey two ounces; mix and take one teaspoonful half an hour before each meal. If the patient is quite weak add to the above one drachm of sulphate of quinine and shake well before pouring out. If the bowels are not in a healthy condition give the Persian pills described on page 96.

APOPLEXY.—A disease produced by congestion or rupture of the vessels of the brain, and causing a sudden arrest of sense and motion, the person lying as if in a deep sleep. It seldom attacks the young, but occurs in middle life or old age. Some believe that patients usually suffer from three different attacks, the first being mild, the second followed by paralysis, and the third ending in death. This is not exactly true, although the danger is greatly increased with each attack.

The persons most likely to be attacked with apoplexy, are those whose ancestors have suffered from it; those who have habits which predispose them to an attack, such as living high; with protuberant abdomens, large heads, short, thick necks, and a flushed countenance; those of a sedentary habit, who are more than forty-five or fifty years of age, and the intemperate.

Warnings.—There are usually some symptoms which precede an attack which, if properly understood by the patient, should put him on his guard, and he should take measures at once to avert the attack. Among the symptoms which are the most important, are giddiness, particularly on stooping, a feeling of weight and fulness in the head, temporary deafness and noises in the ears, double vision or transient blindness, headache, loss of memory, a feeling of numbness in the limbs, drowsiness, with indistinctness of articulation.

Treatment.—As this is a very dangerous disease, no time should be lost in getting a good physician to take charge of the case; but, at the same time, you should not wait without doing

anything for the patient, unless he can be on the spot at once. The first indication is to relieve the head from the accumulation of blood, to prevent further congestion, and to obviate inflammatory action; to accomplish this, raise the head well up and apply cold to the head by means of pounded ice in a bladder or oiled silk bag; loosen all the clothing which is too tight, especially the neck-tie and shirt-collar; apply heat to the feet to induce a flow of blood to the lower extremities, and if the physician cannot reach you soon, give a good thorough cathartic, such as a *full dose* of the Persian pills described on page 96, which should always be kept in the house as a family remedy for cases of emergency, as no physic known to the profession equals them; but if these pills cannot be had, give three compound cathartic pills, U.S.P., and if these are not at hand give a heaping tablespoonful of Epsom salts, or in the absence of these give some other thorough cathartic. Many physicians bleed, but in most cases I believe it to do more harm than good, although sometimes it seems to be necessary if there is a great determination of blood to the head; but if this should not be the case it is apt to do mischief, as the patient will need all his blood in convalescence.

If the patient recovers from the fit, great care will be required afterwards to prevent a second attack. The diet should be light but nutritious; always avoid eating too large meals, which would overload the stomach; also avoid mental excitement, stimulants, or any strong medicines of a stimulating nature, lifting, especially while in a stooping posture, or any unnecessary excitement.

If you are predisposed to this disease, always keep the Persian pills, described above, with you, so that whenever any of the *warnings mentioned above* are noticed, that you can take a dose to produce free evacuation of the bowels, which will avert the attack if taken in season. Always keep the bowels regular by their use.

ASTHMA.—A disease attended with difficulty of breathing and a sensation of constriction in the chest, wheezing, cough and expectoration, and is essentially a nervous disease. The spasms are caused by contraction of the circular fibres of the bronchial tubes. The cause may be in some cases hereditary, while in many cases no influence of this kind can be discovered. In some cases this affection will be owing to some organic disease within the chest, while frequently no such cause can be detected. The fits of difficult breathing may be directly due to some irritant inspired into the lungs, such as dust, certain vapors, cold air, or the emanations from hay. In many cases the fits or paroxysms come on regularly, and usually occur at night. The patient awakes suddenly and experiences a sense of suffocation, difficulty of breathing, great tightness at his chest; he cannot bear the least incumbrance about the chest, and assumes the erect posture with great eagerness. After the fit has continued from one-half to one, two, three, or even four hours, it may subside somewhat, and the patient will raise more or less from coughing, which relieves the difficulty of breathing.

Treatment.—The general health should be improved during the intervals by attention to the diet, thus avoiding all derangement of the stomach; also by avoiding unwholesome air, which is contaminated with dust or any other irritant. To relieve the fit of difficult breathing the following has been used with fair success in most cases, and is probably the best remedy for the largest number of cases:—

Take Stramonium one ounce, pure saltpetre (pulverized) one drachm; mix and place a little in a pipe and take a few whiffs; or, after it is lighted, hold it a foot or two under the nose and breathe the fumes for a minute or more if necessary. If the stomach is overloaded with undigestible food, give an emetic of twenty or twenty-five grains of powdered ipecac; and then, if this does not relieve the fit, give smaller doses of the ipecac occasionally after the vomiting to keep up some sweating; or, give half a teaspoonful of the tincture of lobelia every half hour, and increase it to a teaspoonful if relief is not obtained after a few doses. The above doses are all intended for adults, but for children or weakly women a smaller proportional dose should be given. See table showing the proportion required for different ages. If constipated, take the Persian pills as recommended for constipation. Also see receipts for asthma.

BABY'S SORE MOUTH (Thrush).—This is sometimes called canker sore mouth, and consists of small, round, white elevated specks or patches, or extending over the tongue and lining membrane of the mouth, and extends in some cases down the passage into the stomach. The chief general symptoms are, restlessness, difficulty in swallowing, depression, diarrhœa, cough and vomiting.

Treatment.—In strong constitutions give from two to five grains of magnesia or more, if necessary to loosen the bowels a little if constipated; or, in the absence of the magnesia, give castor oil. Then get at a drug store the following: borax (pulverized) two drachms, glycerine one ounce; mix and apply to the patches with a camel's-hair pencil several times a day. The diet should be regulated, and articles containing sugar should not be given. If the above does not effect a cure after a few days, try the following: Sulphite of soda one drachm, water one ounce; mix and apply to the patches.

BEE STING, BITES, ETC.—For bites of insects and reptiles, give internally sweet oil in sufficient quantities to act as a cathartic; or, give from half a pint to a pint during the day, according to the severity of the case, beginning with three or four tablespoonfuls, and repeat every three or four hours until free evacuation of the bowels is produced, and at the same time apply Kendall's Spavin Cure locally to the wound several times a day. Use the refined for human flesh, if at hand; if not, the unrefined; either will answer. *For the sting of the bee, wasp, yellow-jacket, hornet,* and the like, Spavin Cure applied to the sting is the best remedy known; also for mosquito bites it has no equal.

BLEEDING FROM THE LUNGS.—This, in the greater number of cases, is merely symptomatic of consumption; though it may be due to disease of the heart which impedes the return of the blood from the lungs. It very rarely occurs as the result of some ulceration of the air passages, from abscess, inflammation, gangrene, or cancer of the lungs, aneurism, etc. The blood is usually frothy and of a bright red color, and raised by coughing; while in bleeding from the stomach, the patient vomits the blood usually in large quantities, and of a much darker color than that raised by coughing from the lungs.

Treatment.—The patient should remain as quiet as possible in bed, with the head and shoulders elevated. Give ten to fifteen grains of gallic acid every two, three, or four hours, according to the urgency of the symptoms. Sometimes it is necessary to begin with a large dose in the start, if the bleeding is excessive, and in cases of this kind give thirty grains of gallic acid for a dose, in five ounces of water, with thirty drops of the aromatic sulphuric acid; but in excessive bleeding a physician should be called. In some cases the application of cold over the chest does good, but if this is tried its effect should be carefully watched. Sucking ice usually does much good. A teaspoonful of common salt dissolved in a little water, or taken dry if preferred, will in many cases stop the bleeding for a while. Relieve the cough by opium in some form. (See table of doses and proportions for children.)

BLEEDING FROM THE NOSE.—This occurs frequently in childhood, and is seldom troublesome except in some cases where it comes on during the progress of some disease. When it occurs in advanced life it often gives rise to much anxiety.

Treatment.—Raise one or both of the arms above the head and hold them in that position for some time; if this plan fails, apply cold to the back of the neck, and down the back if thought best, or cold water or ice may be applied directly over the forehead and nose. If the above simple means all fail, swab the nostrils with muriated tincture of iron one ounce, water four ounces, mixed; or use alum and water if the tincture of iron cannot be had easily. If there be a tendency to apoplexy, or if the patient has heart disease, the bleeding may prove to be a benefit if not too profuse.

BLEEDING FROM THE STOMACH.—In bleeding from the stomach the blood is vomited up instead of being raised by coughing, and is usually of a dark color, and may be mixed with the food, and is not frothy as when it comes from the lungs. In some cases of this kind the blood may pass into the intestines.

Treatment.—Perfect rest in bed, abstinence from food for a while, cold ice drinks, and ten to fifteen grains of gallic acid constitutes the treatment which should be adopted in the start. Turpentine, given in doses of twenty or thirty drops, is recommended by some. Cold over the stomach is sometimes useful. If the patient be prostrated, give an injection of beef-tea with a teaspoonful or two of brandy and one grain of pulverized opium or twenty-five to thirty drops of the tincture. Then give for several days half to one teaspoonful of tincture of guaiac three times a day in a little water and taken before eating.

BLEEDING FROM THE URINARY ORGANS.—This is not a very common occurrence, but may take place as the result of an external injury from a fall, blow, or bruise; or it may be a symptom of other diseases. It is sometimes brought on as the result of a strain from jumping, lifting, riding horseback, etc.

Treatment.—We shall only give here the treatment necessary to stop the bleeding; but we recommend the patient to get at the cause, if possible, and endeavor to remove the cause by adopting proper treatment, which will be noticed in its proper place. To stop the bleeding give the following: gallic acid twenty grains, aromatic sulphuric acid fifteen drops, tincture of cinnamon two teaspoonfuls, water three tablespoonfuls; mix and take the whole at one dose, and repeat this every four hours until the bleeding stops.

BOILS.—Boils are so familiar to every one that they need little or no description. The most common causes are, a residence in an impure atmosphere, improper or insufficient food, sexual excesses, mental anxiety, overwork, or anything which causes deterioration of the blood.

Treatment.—If desired, they can be scattered, if taken early, by treating as recommended in the last of the treatment for carbuncle; and, if so, always take the iodide of potassium to purify the blood, when you can obtain it from your drug store; if it is decided not to scatter it, apply poultices as recommended for carbuncle to hasten suppuration. Take the Persian pills described on page 96, to regulate the bowels and improve the condition of the blood.

BRONCHITIS.—This is an inflammation of the membrane lining the bronchial tubes (or air passages). It occurs in every grade, from a slight cold to a very dangerous disease.

Symptoms.—The chief symptoms consist of fever, hurried breathing with a sense of tightness about the chest, but not always acute pain. The cough is severe, and at first is dry; but later expectoration commences. The matter raised is at first clear, tenacious, mucous, and afterwards becomes thicker, more abundant, and purulent. Usually the painful symptoms subside when the patient begins to raise freely. The tongue is foul, pulse frequent, and many times quite weak; there is also headache, lassitude, and great anxiety. If relief is not afforded by the expectoration or by remedies, the disease assumes a very dangerous character, and in many cases soon ends in death. Improvement begins from the fourth to eighth day, in cases which terminate favorably. It is difficult for persons not accustomed to examining the chest, to always distinguish it from pneumonia (lung fever), if the case is one of severity; but in mild cases the symptoms do not usually occasion much alarm.

Treatment.—This disease may be prevented many times by taking a full dose of Dover's

powder (ten grains for an adult) as soon as it is discovered that the patient has taken cold. It may be given at bed-time, accompanied by a hot foot-bath, and some warm, stimulating drink to assist in producing some sweating. In the morning give the Persian pills described on page 98, to act as physic. If the above plan does not cut the disease short, then keep the patient confined to the bed, and give medicines which have a tendency to produce a little perspiration, and also have considerable moisture in the room by placing an open kettle of water on the stove, so as to produce considerable steam in the room. For the cough, which is usually troublesome, give some of the cough mixtures recommended among the receipts for coughs.

If pain and soreness of the chest be prominent symptoms, apply Kendall's Spavin Cure over the seat of pain or soreness, using the refined if at hand, but if not, the unrefined, and repeat this twice a day until the soreness disappears; this is very much better than blisters, or any other outward application that can be used.

Chronic Bronchitis is the result of the acute form of the disease, lingering without complete recovery; in which case sulphate of quinine, in doses of two to four grains, should be given three times a day with a good nourishing diet; also give the cough mixture which seems to work best among the receipts for coughs. Also give the Persian pills, described on page 98, to keep the bowels in a healthy condition, and to renovate the system and purify the blood.

BRUISES.—The best application that can be made to wounds of this character is Kendall's Spavin Cure, which we have seen tried repeatedly, and never knew of anything which removed the soreness so quickly, and restored the part to its natural condition. Use either the refined for human flesh, or the unrefined, as you prefer.

BUNIONS.—This consists of an enlargement and thickening over the joint of the big toe, as shown in the engraving. The cause is usually the same as that of common corns, and it should be treated about the same. Remove the pressure by wearing boots sufficiently large, especially over the bunion, to cause little or no pressure. The best local remedy ever used for this painful affection, is to apply two or three times a day Kendall's Spavin Cure. We never have known the above treatment to fail when the cure was persevered with for two or three weeks, or longer if necessary, in bad cases.

BURNS AND SCALDS.—There is considerable difference in different cases as to the extent of the injury from the burns produced by hot fluids, vapors, etc. In some cases which are only superficial, there will only be slight inflammation or redness produced; while in others, the burn may be so severe as to cause the death of the part, followed by sloughs.

Extensive burns over a large part of the body are very dangerous, even if only superficial.

Treatment.—For burns and scalds of ordinary severity, we have had excellent success by applying Kendall's Spavin Cure, which removes the soreness and restores the part to its natural condition. For cases which are very extensive and deep, so as to cause the death of the part, it is best to call a physician; but, if one cannot be had, apply soothing applications, such as will exclude the air. Slippery-elm poultices, grated potatoes, cotton saturated with sweet-oil or glycerine. If the pain is severe, give for a grown person a teaspoonful of paregoric, and less for children, according to the age.

CALLOUS.—This is a thickening of the skin or other tissues, and is caused by pressure or as the result of some injury. They are similar in their nature to a corn or bunion, and should be treated the same. Most cases require treatment for several weeks to remove wholly.

CARBUNCLE.—This is a severe inflammation of the skin and subjacent tissue. The swelling is flattened, hard, and more or less circular in shape; very painful, and of a dull red color. Its size varies from half an inch to five, six, or even seven inches in diameter. There is throbbing, much heat, and a dull, aching pain in the whole of the affected part. As time passes on, suppuration takes place in the tumefaction. They are situated most frequently on the back part of the neck, or on the back, shoulders, etc. They rarely occur in childhood.

Causes.—Carbuncles, as well as boils, have their origin in a vitiated state of the blood, only with the former it is in an exaggerated condition. They arise sometimes in persons weakened by disease, or from an unhealthy condition of the atmosphere, or from some powerful irritant, when the predisposing influence is present.

Symptoms.—The patient notices for a day or two before the appearance of the carbuncle that he is not well; there is a sense of languor and chilliness, and as the inflammation appears, the constitutional disturbance becomes marked in proportion to the extent of the morbid process, and there is headache, confusion of mind, irritability from the pain, feeble, rapid pulse, and the tongue thickly furred. Occasionally there is much fever and prostration, and the case becomes quite serious, and should have the attention of a good physician as early as practical.

Treatment.—Poultices of linseed-meal should be applied, and changed sufficiently often to keep warm and moist. If the flaxseed-meal cannot be had, use a poultice made of wheat bread and milk. Apply to the poultice, just before putting on to the carbuncle, two or three grains of powdered opium, or half to one teaspoonful of laudanum (tincture of opium). Many physicians practise cutting an incision down to the base of the swelling as early as possible after the

carbuncle is started; but we do not recommend this without consulting a physician. In the early stage of carbuncle give a full dose of the Persian pills, described on page 96, to produce free action of the bowels and liver. The above pills should be used in preference to any other physic, on account of the valuable effect they produce on the blood; but if it is impossible for you to get them, give a full dose of Epsom salts; later, give tonics to support the strength, say two grains of quinine before each meal three times a day. If taken as soon as first noticed, they can be scattered by applying Kendall's Spavin Cure freely, and giving a full dose of the Persian pills described above; after these have operated freely upon the bowels, give the following: Iodide of potassium one-half ounce, citrate of iron one-half drachm, water four ounces; mix, and take one teaspoonful after each meal, and lessen the quantity a little if it produces a brassy taste, which does not disappear before the next meal.

CATARRH.—This term is commonly used to signify a chronic inflammation of the Schneiderian membrane of the nose; but it more properly signifies an inflammation of the respiratory organs. When the disease is located in the head, and becomes chronic, it is attended with an offensive purulent discharge; and it may be accompanied with scrofula or with caries (disease of the bone), in which case it becomes quite troublesome.

Treatment.—For the acute form, see treatment of COLDS and COUGHS. After this difficulty has become chronic the following treatment will usually prove as satisfactory as any. The treatment should be constitutional as well as local. The best local treatment is to take two large tablespoonfuls of common salt and dissolve it in one quart of soft water, warm to nearly blood heat, and place in a Nasal Douche, and use as shown in the engraving by placing it a little higher than the head, pressing the rubber tube with the thumb and finger so as to prevent the fluid escaping; introduce the nozzle at the end of the tube into one nostril, and press it in so as to close the nostril, then stand in the position as shown in the cut; open the mouth, and breathe through the mouth; avoid swallowing while the fluid is passing through the nostrils. Then let up the pressure so as to allow the fluid to flow, which will pass up one nostril and cleanse all the affected membranes and pass out the other nostril. Remember not to swallow while the liquid is flowing, and also remember to breathe through the mouth, and then you will find it will work perfectly. After you have allowed about half the fluid to pass through from one nostril, change and let it run in through the other, allowing most of it, if not all, to be used, if it is needed to cleanse the parts thoroughly. After using the salt and water, as recommended above, place an ounce or two of the following solution in the douche, and allow it to pass through the nose as before: Take sulphate of zinc one drachm, water one pint; dissolve, and use two to four tablespoonfuls after using the salt and water. **Repeat the above two or three times a day.**

MANNER OF USING THE NASAL DOUCHE.

The following should be taken when using the above, and should be continued, if necessary, for several weeks: Take one drachm of the citrate of iron and quinine, two ounces whiskey, and two ounces of water; mix, and take one teaspoonful half an hour before each meal. Also take at the same time the following mixture: Half an ounce of iodide of potassium, four ounces fluid extract of sarsaparilla, two ounces of fluid extract of yellow dock; mix, and take one teaspoonful half an hour after each meal. A good nourishing diet is quite important. It is also quite important, in treating this disease, to take the Persian pills described on page 96, to regulate the bowels, and also to produce a purifying effect upon the blood.

CHICKEN-POX.—This disease is almost confined to childhood, but occasionally affects adults. It is quite insignificant as regards distressing symptoms or danger, but is important to distinguish it from small-pox or varioloid. It completely runs through all its phases in six or eight days, and consists of an eruption of pimples, which on the second day become converted into transparent vesicles, and is surrounded by slight redness. The breaking out begins on the shoulders and back, and later appears on the scalp; but often-times it does not appear on the face, and about the fourth day small scabs are formed on the vesicles, which dry down rapidly. The fever is slight, and there are no alarming symptoms as in small-pox. It is contagious, and occurs but once to the same person. It requires no treatment, except to confine to the bed, and attention to the bowels by a proper use of the Persian pills, described on page 96, in sufficient doses to produce a moderate movement of the bowels.

CHILBLAINS.—This affection is usually the result of slight frost-bite, and generally occurs on the feet, but may at times occur on the hands. It occurs many times without freezing, by the parts being exposed alternately to extreme cold and heat. The affected part is somewhat swollen and of a purplish-red color, attended with intolerable itching at times, especially if the weather is about to moderate. It appears in the Winter or Spring.

Treatment.—Apply Kendall's Spavin Cure freely night and morning, and oftener if it should be necessary. We never knew this treatment to fail. If the bowels are constipated, use the Persian pills recommended on page 96.

CHILDREN, SICKNESS OF.—Children are frequently sick when no regular form of disease can be recognized, and the difficulty will be functional derangement of the stomach or bowels, caused by eating some indigestible food, etc. The child is hot and feverish, and many times quite dumpish. If it is feared that any particular form of disease is present, it would be well to read description of that disease; but if it is evident that the cause is as we have suggested above, it would be well to give a full dose of castor oil to produce free action of the bowels, so as to remove any undigested food which might remain in the stomach or bowels to keep up an irritation, and thus cause severe fever and sickness. In every case we ever noticed, such as we have described above, if castor oil was given promptly, sufficient to act freely on the bowels, recovery soon followed; and we believe much suffering might be cut short by resorting to this plan promptly. The oil never has done any harm in any case we ever saw it used for.

CHOLERA.—This dreaded disease is called by various names, such as Asiatic cholera, Epidemic cholera, etc. It seems to have started from India and to have existed there for a long period; but in other parts of the world it has existed solely as an epidemic. It has visited this country several times since its first appearance in 1832.

Symptoms.—Simple diarrhœa precedes a great majority of cases, the dejections being more or less in number, painless and copious. This diarrhœa which precedes the attack may last for a few hours only, or it may continue for several days. In some cases vomiting occurs with the diarrhœa. There are no other symptoms, excepting those mentioned above, which indicate a tendency to the disease. Owing to this fact, it is many times difficult to persuade the patient to think there is any danger from this disease, as they feel quite well with the exception of the diarrhœa, which is not particularly troublesome. In about one out of every five to twenty cases, on an average, the premonitory symptoms of diarrhœa is wanting, but varies considerable from this in some epidemics. The development of cholera is usually first noticed by characters relating to the intestinal evacuations. If there has been diarrhœa as described above, the discharges are suddenly increased in quantity; or, if diarrhœa has been absent, there will be sudden and copious liquid discharges. These symptoms, which usually occur in the night, constitute the attack. The stools are of a rice-color, and look like grains of rice in rice-water, or flakes of curd in whey, and has a yellowish-white color. Vomiting occurs in a portion of the cases, also cramps, sometimes of the muscles of the abdomen, and in other cases, muscles of the limbs also. The pulse is rapid and feeble. Very little pain is experienced excepting from the cramps. The heat of the body is diminished several degrees, sometimes six or eight. Thirst is a prominent symptom. The skin becomes cold, patient very restless, and death usually occurs in six to twelve hours.

Treatment.—The most important measures to be adopted are, to prevent, if possible, an attack, by removing, as far as possible, everything which is thought to favor the development of the disease, and to treat *promptly* the diarrhœa which precedes the attack in a great majority of the cases. We wish to impress upon the minds of our readers, if possible, the *great importance* of treating every case of diarrhœa which occurs during an epidemic of cholera; for experience has proved, beyond a doubt, that if taken *at once*, as soon as the first symptoms of diarrhœa are noticed, that an attack of cholera is averted in nearly every case, if the following treatment is adopted. Never give cathartics in any case; but adopt an opposite treatment, and give for the diarrhœa the following: Tincture of opium four drachms, tincture kino one and one-half ounces, tincture of camphor six drachms, tincture of capsicum six drachms; mix, and for an adult take one teaspoonful in a little water, and, if necessary, repeat in fifteen or twenty minutes; after it stops, it would be well to take two or more doses, two or three hours apart, to be certain that the diarrhœa has been effectually checked. If anything should be necessary to move the bowels during the epidemic, use injections just sufficient to insure one evacuation. For a child twelve years old, give half the above dose; four to six years old, one-fourth the quantity. If every one would be particular to note the above facts, and get the above prescription filled at a drug store as soon as it is evident that they are having an epidemic of cholera, and then be particular to take it according to directions, as soon as they notice any diarrhœa, then be particular to rest from any labor for a while, and be careful not to eat anything which is liable not to digest easily, they will be quite sure to avert an attack, if anything will do it. It is also a good plan to get an ounce of subnitrate of bismuth, and take the bulk of a pea after eating, and from six to ten times during the day. Those who can with propriety should remove without the range of its prevalence.

It is quite important in the hot season of the year to pay strict attention to sewers, cesspools, and privies; also to look to the water supply, whether it be wells or from other sources; providing against overcrowding tenements; also by efficient quarantine regulations, etc. If cholera is once established in any city or village, prompt measures should be taken at once to disinfect every house in which it occurs thoroughly, and in this way it may be "stamped out" entirely in many instances. The preceding remarks have been made with a view of preventing or curing

the disease before it is fully developed; but, if this is neglected until cholera is fully developed, the best remedy to rely on is some form of opium, either the tincture or morphine. We prefer morphine placed on the tongue dry and in large doses, at least from two to four times the size of an ordinary dose of one-eighth of a grain. Some even give as much as three-fourths or one grain at a dose, but we would not advise quite as large a dose; but the patient should be watched closely, and if the first dose be vomited as soon as taken, more should be given at once. The remedy should be repeated from half to three-fourths of an hour until the dejection cease. If vomiting should occur so frequent as to prevent its being taken effectually, it should be given in injections, and the quantity should be increased, if given this way, to double the amount given by the mouth. As there is a possibility of giving an overdose of the morphine, we recommend to have a physician present to watch its effects, if it is possible to obtain one; but it should be borne in mind that the remedy should be given promptly if you would save life; and in many cases if you were to wait for half an hour or an hour before giving the morphine, it would be too late to save life. You should rely upon the opiate and not add other remedies, but have the patient lie quietly in bed and hold pieces of ice in the mouth; and he should not be allowed to get up to go to stool, and should be urged to resist, as much as possible, the desire to evacuate the bowels. An injection of one tablespoonful of brandy and two or three tablespoonfuls of beef-tea, repeated every half hour, or every hour, are often beneficial. Avoid producing deep sleep, if possible, by the large doses of the opiate. In the stage of collapse apply warm blankets or other artifical heat, and give stimulants in water as freely as the stomach will bear without inducing vomiting; also give ice in small lumps.

CHOLERA INFANTUM?—This disease is one of the most fatal affections to which children are subjected. It is known by some as Summer complaint of infants, and occurs most extensively in large cities; but no section is exempt from it entirely. It occurs most frequently during the period from four to twenty months of age. It commences with a profuse diarrhœa; this is succeeded by irritability of the stomach, and the child vomits frequently, and soon becomes languid and prostrated as the result of the frequent vomiting and purging. The pulse is quick; the tongue white and slimy; skin dry and harsh; the head and bowels are hot; but the feet and hands may either be natural in temperature or cold. Soon there is fever, pain, and restlessness. Death may occur in six or eight hours; but usually the case is more protracted. The child lies with the eyes half closed, with imperfect sleep, and takes but little notice of what is transpiring in the room. In a few hours the body becomes cold; the tongue dark, and the throat dry; the bowels bloated; the discharges dark colored, offensive, and profuse, or in some cases may be small.

Treatment.—This is one of the diseases which should be attended by a good physician when practical; but if not, treat as follows: If the case resembles cholera of adults, the indications are to arrest the vomiting and purging as soon as this can be done, and to restore heat by applying warm, dry flannels or other artificial heat. Sustain the system by giving brandy in quantities of half a teaspoonful in a little water, and repeated every half hour to an hour, or oftener if necessary, to sustain the powers; also give as much of good beef-tea, made from fresh beef-steak. Control the vomiting and purging by giving ten to fifteen drops of paregoric, and give the second dose in half an hour; and after this, repeat every hour or every second hour, as seems to be necessary. Physicians might give more at times, but there is some danger from an overdose, if given in larger quantities by a person unaccustomed to its use; if the child is only four to six months of age, perhaps five drops might do to begin with, and then increase the dose if necessary. Also apply mustard pastes over the stomach to assist in stopping vomiting. Also give five to twenty grains of the subcarbonate or the subnitrate of bismuth, and repeat every one, two, or three hours, as seems to be necessary. Milk with lime-water is usually retained better than other nourishment, if given in small quantities at a time, perhaps one teaspoonful, and repeated as often as thought best. The opium treatment, as given above in the form of paregoric, is not always indicated, especially in the milder cases. In some cases where the discharges are very light colored, give a few small doses of one-tenth of a grain of calomel, or one-half grain of mercury and chalk, followed by one or two grains of rhubarb, with half the quantity of soda, and repeated every two, three, or four hours. Some cases the diarrhœa is controlled by one-tenth to one-half grain of tannic acid, or by four to ten drops of tincture of kino in a little water. An important item in the treatment is to regulate the diet; we do not mean by this to starve the child, by any means, but, on the contrary, give good, suitable, and nourishing diet, but be particular to avoid everything that is not easily digested. Pure milk is the most natural and appropriate food in most cases, and in some cases it would be well to add boiled flour. Some give raw meat, tender beef being most suitable, and should be pounded to a pulp and a little salt added.

CHOLERA MORBUS.—This disease prevails generally in the hot season, and consists of violent, griping pain in the bowels, followed by frequent vomiting and purging of green bilious matter. The attack occurs oftener in the night than in the daytime.

Cause.—Indigestible food, or a change of food during the hot weather; especially by eating a considerable amount of fresh meat for several days after one has been without it for a long time, in which case he is liable to eat more of the meat than is advisable. Constant exposure to a high temperature, etc.

Treatment.—If it is evident that the stomach yet contains any undigested food, such as uncooked vegetables, etc., an emetic might be indicated; and if so, give to an adult twenty grains of ipecac to clear the stomach; but as the stomach is usually unloaded of everything of this kind as soon as vomiting occurs, an emetic is very rarely indicated. The stomach having been

emptied of its contents, the next indication is to arrest the vomiting and purging, as well as the cramps and pain, by opium in some form, in sufficient doses to effect this object. Laudanum (tincture of opium) is perhaps the best form to give the remedy, in doses of twenty-five to thirty drops to a grown person, and a proportionally smaller dose for children. If the opiate be vomited as soon as given, another dose should be given, and so on; but if it cannot be kept on the stomach, twice the quantity should be given in a little starch-water as an injection, just after evacuation, and the patient urged to resist as long as possible the inclination to expel it. If the first be rejected, a second or third injection may be given if necessary. Whichever way the remedy is given, it should be repeated every two hours, or oftener if necessary, until the vomiting and purging are arrested; but do not repeat the doses so often as to give an overdose. Water should not be allowed, nor for a while after vomiting has been arrested, as it prolongs the affection; but pieces of ice may be held in the mouth.

COLIC.—This consists of severe griping pains in the bowels, usually with costiveness, and often by vomiting. There is no fever nor quickness of pulse. The pain, which is of a twisting character about the navel, is relieved by pressure. It comes on very severe, and then lets up so there is perfect or partial ease.

Bilious Colic is that variety which occurs in the Summer or Fall, and is produced by some derangement of the liver. In these cases there is tenderness in the region of the liver, and vomiting of bilious matter, also a jaundiced appearance of the skin and eyes.

Treatment.—In cases which are not very severe the application of hot cloths to the abdomen frequently affords relief. Ginger tea or anise may relieve mild cases; but where the above treatment fails, give, if the patient is an adult, one teaspoonful of paregoric, and repeat if necessary in an hour. Children should have a proportionally smaller dose. Apply heat to the abdomen in every case, as indicated above. If the bowels do not move spontaneously in one or two days, give the Persian pills described on page 96 to move them.

It is claimed by some that one teaspoonful of common salt dissolved in half a teacupful of cold water, and taken as soon as possible after the attack, will cure nearly every case.

CONSTIPATION.—This occurs under so large a variety of circumstances that it would be impracticable for us, in our limited space, to give each a thorough description; but suffice it to say that the most common form of this difficulty occurs with those whose habits are sedentary, and who have allowed themselves to become so by neglecting to be regular in going to stool. This difficulty may seem to many to be of little importance, but we can assure such that they are in error, for there is perhaps as much suffering caused, either directly or indirectly, by this as from any disorder. The great variety of bad feelings and unfavorable symptoms which it causes are numerous.

Treatment.—The best remedy known for this troublesome disease is the Persian pills described on page 96; but, in addition to a proper use of these pills, an important part of the treatment of habitual constipation is to adopt a rule to solicit an evacuation at the same hour every day,—just after breakfast being perhaps the most favorable time. This plan should be persevered with, and after a time success will be accomplished; but in most cases a few doses of the Persian pills will be required for a time. The above plan should be persevered with every day all through life.

CONSUMPTION.—It would be impossible for us, in the short space allotted for this subject, to give it a thorough description, and we shall not therefore attempt this, but only notice some of the most approved methods of treatment, taking it for granted that all are more or less familiar with the nature and symptoms of the disease.

Treatment.—It is evident that certain remedies have a beneficial effect; but it is also quite as certain that strict observance of the laws of health is of greater service, if possible, than any medicines can be in curing this disease. The best thing to restore strength is to have frequent and proper exercise in the open air, and a good nourishing diet, composed largely of good fresh beef, or other fresh meats frequently, to give a variety; also fresh milk, and fresh sweet cream and butter should be taken as largely as can be without causing disgust, or causing indigestion. The most important object in the treatment is to nourish the body to the fullest possible extent, and to do this the patient must persevere in following out the directions given. If the appetite is deficient, as it usually is, it should be encouraged as much as possible by taking tonics to accomplish this end. Give one or two grains of quinine half an hour before each meal; and, if the bowels be constipated, give the Persian pills, which are noticed on page 96, at bed-time, in sufficient dose to overcome this difficulty, and repeat them whenever it may be necessary. If these fail to increase the appetite after a fair trial, other bitter tonics may be tried; but the above, if persevered with, will be most likely to do good.

A diet which is composed mostly of fresh milk has many times done much good when the appetite has been poor, or when other articles of food cause disturbance of the stomach and digestion; and even if this is not the case, it is always safe to take milk as a part of the diet. But if the milk is relied on mostly, it should be taken in large quantities, so as to nourish the body sufficiently.

As stated above, exercise in the open air is, of all measures, the most important. Some place great importance in a change of climate, and this may be well in some cases, if taken early; but we have known of so many who have tried this plan after the disease was far advanced, and only went from home to die among strangers, that we have but little faith in this plan as a rule; for the disadvantages which one is compelled to put up with, and the fatigue caused by travelling, more than overbalance all the good received in the majority of cases; but the patient should select

some out-door work, which is so light as not to cause fatigue, such as work in the garden; or ladies sometimes prefer spending their time in making and caring for a flower-garden. But, whatever the employment is, it should be such as the patient can and will become interested in, so that they will have some enjoyment in attending to it, and not be compelled to do it simply as they would take a medicine, because they think they must. We would caution the patient against attending to the work selected so closely as to get very tired. The sleeping-room should be well ventilated by keeping the window open; but good common sense should be exercised in this, by beginning gradually to raise the window a little each day, until the patient has become accustomed to it, and by not opening a window in such a position as to allow the wind to strike the patient. Cold air is not always pure, as some imagine; and in winter a fire may be kept in the sleeping-room, but the window should be kept open.

The clothing should be warm, to protect the body against atmospherical changes, always wearing flannels next to the skin. The greatest obstacle in many cases is the lack of perseverance on the part of the patient in carrying out the above plan strictly and continuously until recovery takes place fully.

Having noticed what we consider the most important measures in the treatment, we proceed to mention a few remedies which are held in more or less esteem by different authors. Cod liver oil in many cases does much good, if it does not impair the appetite or digestion, nor occasion derangement of the bowels; but if it does produce any of these derangements, the propriety of using it is questionable. Some claim that fresh sweet cream is preferable to the oil, but both should be used if they do not produce the above-named effects. Citrate of iron and quinine, in doses of two or three grains, half an hour before each meal, is indicated in cases where the patient is weak, pale, and has a poor appetite. The numerous cough medicines which increase expectoration are not in most cases of any advantage, as they have a tendency to diminish the appetite and disturb digestion. The patient should resist the inclination to cough as much as possible.

In cases where there is considerable pain in any portion of the lungs, you should apply Kendall's Spavin Cure over the location of the pain, by bathing it gently with the refined if you have it; if not, use the unrefined, and in either case apply it two or three times a day, which will usually cause it to subside in a few days.

CONVULSIONS OF CHILDREN.—Fits or convulsions frequently occur in infancy, during the first few years of life. The causes may be quite numerous, but we shall not attempt to treat all varieties. The most frequent causes are the presence of some irritating substance in the stomach or bowels, an overloaded stomach, or inflammation of the gums during teething.

Treatment.—The first indication is to apply cold to the head and temples, by applying a cloth wet in cold water, and to apply warmth to the feet to equalize the circulation. Then, if possible, find out the cause, and remove it. If it be on account of the gums being irritated, cut them; or if not familiar with the proper manner of doing this, call a physician to do it for you. If the cause be from an overloaded stomach, give to a child one year old two grains of ipecac, unless it be decided that the brain is affected, and in this case call a physician, who will be more likely to get at the true cause.

CORNS.—This is a horny hardness of the skin, and occurs chiefly on the joints, but may appear upon any prominent part of the body subjected to pressure. It occurs most frequently on the joints of the toes, owing to the irritation of badly-made boots.

Treatment.—The cause of the corn being pressure from badly-fitting boots, or those made from hard unyielding upper leather, it is readily seen that to effect a permanent cure attention should be given to having the boots properly made from suitable leather. But to effect a cure of bad corns has always been quite difficult, until the discovery of Kendall's Spavin Cure, which always cures if used as follows: Soak the feet for about fifteen minutes in warm water, then pare off the corn carefully with a sharp knife until the hard substance has all been removed; then apply Kendall's Spavin Cure two or three times a day for several days, or weeks if necessary, which is sure to effect a cure if above directions are persevered with.

CROUP.—This is a dangerous and distressing disease, which occurs in childhood, and is most apt to occur in cold moist weather. There are two varieties, the membranous and catarrhal,—the former a very fatal disease, and the latter much more mild.

The *catarrhal croup* is characterized by symptoms similar to those of a cold; but at night the croupy cough comes on suddenly, the child awaking with the characteristic sound, which is of a peculiar shrill sound, like the barking of a dog.

The *membranous croup* may resemble the catarrhal variety in its symptoms at first; or they may be from the first of a peculiar character, the child going about with a muffled voice and cough, and the parents many times suppose it to be nothing more than a common cold; but soon the exudation causes obstruction in the throat, and the breathing is difficult. Spasms of the throat may be more or less present; and, as the disease advances, the obstruction is increased, the labor of breathing becoming greater, and attended with much distress. The voice is reduced to a husky whisper, and there are marked indications of distress and suffering. It occurs in some cases as a complication of diphtheria.

Treatment.—Keep the child in bed, and clothe in flannel; the air should be kept warm and

moist by placing an open kettle of water on the stove. Then the following mixture should be kept on hand in the house, and as soon as the first symptoms of this disease are noticed, give the preparation as directed below, which will in many cases with proper management cut the disease short: Take of tincture of bloodroot one ounce, tincture of lobelia one ounce, wine of ipecac one ounce, and hive syrup five ounces; mix, and give to a child one year old, five to ten drops; two years old, ten to fifteen drops; four years old, fifteen to twenty-five drops; and eight years old twenty-five to forty drops; older or younger children in proportion to age. The above is also a good cough medicine for various coughs. If the above medicine does not relieve the symptoms after a few doses have been given, it would be well to give an emetic of ipecac. For dose, see table of doses. In addition to the above treatment, bathe the outside of the throat freely with Kendall's Spavin Cure, using the refined, or in the absence of this, the unrefined. Then apply a flannel cloth outside, and repeat the application of the cure two or three times a day.

If the throat become obstructed at any time from an accumulation of mucus, the ipecac should be given in sufficient quantities to produce vomiting, which will remove the obstruction usually. In *very bad cases*, where other treatment has failed to afford relief, some have claimed to find relief by applying cold to the neck. If this plan be decided upon, you should begin by applying cloths wrung out of cold water, and repeated every five minutes, so as not to allow it to get warm; and after a few applications, pounded ice in a bladder or oiled-silk bag may be kept to the neck. The temperature of the room should be kept up to 80° or 85°, and the room filled with steam; this is very important.

CURVATURE OF THE SPINE.—This occurs in children of a scrofulous constitution, and is caused by a lack of a sufficient amount of lime and other earthy matter in the bones. The disease is essentially identical with rickets, and the treatment should be quite similar. The patient should be allowed plenty of fresh and pure air, good nourishing diet, in which pure milk should enter largely, and also a reasonable amount of good beef or other fresh meat. Also frequent bathing in water with a large handful of salt dissolved in it. Give citrate of iron and quinine; for dose, see table with proportion for children. Do all that is possible to improve the general health. See also rickets. In addition to the above bathe over the spine once or twice a day with Kendall's Spavin Cure, and keep the bowels regular by a proper use of the Persian pills described on page 96.

DEBILITY.—This may occur as the result of various diseases; and without attempting to describe all the circumstances in which it may occur, we give a few prescriptions which will do great good usually. In the majority of cases there is a lack of nutrition; and to overcome this difficulty tonics must be taken which will tone up the stomach and increase the appetite, so that more food will be taken with relish. Many of the cases of debility will be treated under their proper heads; but if the cause is unknown, so that you are unable to decide as to the real nature of the disease, give one or two grains of quinine to increase the appetite and strength; if the patient is pale as well as debilitated, give three or four grains of the citrate of iron and quinine instead of the quinine alone, and repeat three times a day half an hour before meals. Compound tincture of gentian, in doses of one or two teaspoonfuls half an hour before meals, is an excellent bitter tonic for some cases. In addition to the above, it is very necessary to have a good, generous diet into which fresh meats, eggs, and milk should enter largely. All the laws of health should be observed, and all excesses avoided. The bowels should be regulated by using the Persian pills mentioned on page 96.

DIARRHŒA.—This term is used to denote morbid frequency of intestinal discharges. Diarrhœa may occur in the course of various diseases, or it may occur when there is no other disease afflicting the patient, in which case it may be the result of overfeeding, or the use of improper food, such as unripe fruit, raw vegetables, etc., or the drinking of foul water, or exposure to great heat, which is the cause of so much of this disease in the Summer. This disease should not be confounded with dysentery; for description of which see DYSENTERY.

Treatment.—In an ordinary case of diarrhœa caused by indigestion, usually calls for little or no treatment, unless, if the bowels contain undigested food, which is not expelled without, give a dose of Epsom salts to clear the bowels, and then if relief is not afforded, give a dose of one grain of powdered opium, and repeat in six or eight hours if necessary; but do not give the opium for too long a time, as it impairs digestion. The subcarbonate or subnitrate of bismuth, in doses of from five to forty grains for an adult, is an excellent remedy for many cases, as it relieves intestinal irritation. The diet should be regulated and remedies given to assist digestion. Various vegetable astringents are given with more or less benefit: among which are kino, tannic acid, gallic acid, blackberry root, etc.; for doses of which, see table of doses. Subcarbonate or subnitrate of bismuth, in doses of from twenty to sixty grains, repeated three or four times a day, are among the most valuable remedies for chronic diarrhœa. For further treatment see receipts for diarrhœa; for children see also CHOLERA INFANTUM.

DIPHTHERIA.—This may be defined as a sore throat of great gravity, due to poisoned blood, and is attended with great prostration. One of the principal features of the disease is the exudation of a false membrane on the tonsils and adjacent parts. Before diphtheria breaks out in any locality, throat affections are sometimes noticed to be unusually prevalent. Different cases vary considerable in the development of the disease. Sometimes the attack is abrupt, commencing with a chill, followed by fever; or in other cases the disease may begin with symptoms denoting great prostration. In other cases the development of the disease is gradual, the patient complaining of various ailments. There is but little pain or soreness in the throat, and on this account there is a liability of overlooking its existence if the throat is not examined;

especially is this the case in a proportion of the cases of this disease. The breath is notably fetid in some cases. The tonsils and throat are swollen so much in many cases as to cause some obstruction to respiration. In some mild cases the patient considers it as a trivial affair, and does not take the bed, and even does not keep within doors; this is very unsafe, as grave symptoms are liable to develop even in the mildest cases at the outset. The extent of the throat difficulty is generally in proportion to the gravity of the case; vomiting occurs in some cases. Diarrhœa is also another symptom which occurs sometimes, and is unfavorable. The average duration of the disease is from eight to fifteen days, excepting in some grave cases, in which death occurs in two, three, or more days, while in others it may extend to several weeks. Paralysis occurs occasionally about the throat and mouth. Extensive paralysis affecting the limbs, etc., is very rare.

Diphtheria is an epidemic disease. It is also evident that the exudation contains a contagium, as cases have followed the accidental introduction of the exudation from the throat of a diphtheria patient into the nostrils or mouth.

Treatment.—We would advise in treating this disease, to employ a good physician, as we believe it to be unwise for any person not having had considerable experience in treating the sick in cases of this kind to take too many chances in a disease which proves fatal in so large a per cent of cases; but as it is always best for everyone to know as much as possible about the best treatment in cases of this kind, and as physicians cannot always be had when most needed, we give the treatment which is considered the most successful in the largest number of cases. For a gargle take chlorate of potassa one ounce, muriated tincture of iron one ounce, water seven ounces; mix, and shake well, and use as a gargle every hour, or oftener in bad cases, and rinse the teeth well after using it each time, so that it will not injure them. If there should not be any swallowed each time it is used, the patient should take about a teaspoonful after gargling each time. This is an excellent gargle for any canker sore throat, and if used promptly and thoroughly, it will cut short diphtheria in many cases. If improvement is not noticed in a few hours after the commencement of the use of the above gargle, it would be well to discontinue its use, provided the fact be fully established that the patient has diphtheria; and then if this be evident, try the sulphites, which are supposed to have the effect to destroy the germs which exist in the throat. Give from twenty to thirty grains of the sulphite of sodium every two or three hours, for an adult; then give half way between these doses, large doses of whiskey or brandy, say one or two tablespoonfuls, or more if it can be borne well, with one or two grains of quinine with each dose, and continued until improvement takes place. The patient should be nourished by giving beef-tea and milk, in quantities of one tablespoonful of the former, and two or more of the latter, and repeat every three or four hours; a greater or less quantity may be indicated in some cases, but usually more should be given if borne well on the stomach; but, if not, injections of three or four times the above quantity should be given every three hours to sustain the strength.

The matter of nourishing the patient, as indicated above, is *very important* in this disease, as well as in any case where the strength is liable to fail rapidly, and at the same time the stomach does not bear the food well. If vomiting occur, give ten-grain doses of bismuth to relieve this symptom. If diarrhœa occur, give one-half to one grain of powdered opium, and two or three grains of tannic acid. The inhalation of steam sometimes relieves the throat affection if it has extended into the larynx.

Various other remedies have been used with more or less benefit; among which are sulphur, which has been claimed by some to be very good for this disease; also a peculiar case has been reported to us which is as follows: Mr. Ameda Chartier, of West Farnham, P.Q., Canada, informs us that a few months ago he had diphtheria and began to recover, when for some reason he had a relapse; he rapidly grew worse, until his physicians and his family gave up all hopes, and said he must die; but as a relative to the patient had been using Kendall's Spavin Cure with remarkable success, he informed the rest of the family that, as it was evident that he must die, and the physicians could do nothing more for him, he wished to try the Spavin Cure for him, because it had far exceeded his expectations in every case for which he had used it, and he had faith in it sufficient to prompt him in a trial, inasmuch as he must die if this did not cure him; and, accordingly, he bathed the outside of the throat freely with the Spavin Cure, full strength, and then reduced it half with water and used it as a gargle; after a short time he noticed slight improvement, and in two days the improvement was quite rapid, and he soon recovered, to the astonishment of the doctors as well as every one who was acquainted with the facts.

The above case is remarkable, and we give the man's name, so that anyone can write him in regard to the cure who may wish to do so. If this remedy should prove to be as beneficial in every case as in the one we have related above, it would be of incalculable value to the people of this country.

DISEASE OF THE HEART.—Of the various diseases of the heart, we shall only notice functional derangement of the heart, which is usually produced by excessive use of tobacco, tea, fast living, or indigestion, and does not indicate that there is any organic disease, although it may closely simulate cases of this kind. The patient may have the following symptoms: irregular feeble pulse, palpitation, and fluttering about the heart; there may be either a dull ache over the heart, or occasionally sharp pains. There is always great depression of spirits. Some complain of a sense of choking, or of the rising of a ball in the throat; and there may be occasional attacks of faintness, giddiness, headache, noises in the ears, etc.

Functional disturbance of the heart may be associated with the derangements due to nervous exhaustion, such as mental anxiety, over-study, sexual excesses, etc.; or may be the result of dyspepsia.

Treatment.—It is quite important in treating cases of this kind to ascertain first what the cause of the derangement is, and then, if possible, remove the cause, and give tonics to restore vigor and natural action of the heart. In a large proportion of the cases treated by the author, it was ascertained that the cause was due to excessive use of tobacco, or tea, or both; and all were relieved in due time by leaving off the use of tobacco and tea, and by taking fifteen to twenty-five drops, usually twenty-five, of syrup of iodide of iron, in a little water, fifteen minutes after each meal. If the patient is debilitated and nervous, with poor appetite, give half an hour before each meal, one or two grains of quinine, and give the syrup of iodide of iron after, as recommended above. To relieve the pain in the heart, apply a little of Kendall's Spavin Cure over the region of the pain two or three times a day. If constipation exists, give the Persian Pills noticed on page 96, and continue to use them when necessary, as well as to follow other directions given under the treatment for constipation.

DROPSY OF THE BRAIN.—This occurs in children, under a variety of circumstances. In this disease the head attains a very great size. In some cases the bodily functions are impaired but little, if any. Some cases exist from birth, and generally the enlargement may be noticed before the child is many months of age. The child may take its food eagerly, but will not thrive, and the body either does not grow as it should, or may waste away. There is great peevishness and irritability, a great susceptibility to light and sound. There is usually constipation, with offensive stools; and occasionally headache, and sickness at the stomach, etc. In many cases the child becomes so weak that it is impossible to maintain the head in the erect position.

Treatment.—The author has treated several cases, which made complete recoveries, by persevering with the following plan: For a child one year old, iodide of potassium one drachm, citrate of iron twenty grains, water eight ounces; mix and give one teaspoonful every six hours. For a child two years old, a half more should be given. This should be persevered with for many days, and for a few weeks; and after it has been given for several days, three-fourths of a teaspoonful may be sufficient; but the smaller doses should be given for a long time. If the bowels are constipated, give powdered rhubarb and half the quantity of common soda, in sufficient quantity to produce one free evacuation; and if this should be necessary, it can be repeated every two or three days if thought best. Give the patient good nourishing food, such as pure milk, and a little animal broth, etc. If the appetite be deficient, give one-eight to one-fourth grain of quinine before taking the nourishment. Pure air is quite important, as well as the observance of all the laws of health.

DYSENTERY.—Dysentery consists of an inflammation of the mucous membrane of the large intestines, and is characterized by mucous and bloody discharges, with a constant desire to go to stool with great straining, but many times without any discharge.

Acute dysentery may be epidemic or not. There are griping pains in the bowels, usually quite severe before going to stool, and may be somewhat relieved by the discharges, which occur often, and number in some cases thirty, forty, or even fifty or more, in twenty-four hours. The stools become fetid, dark-colored, and mixed with mucous, blood, and purulent matter. There is a more or less constitutional disturbance, with fever; the tongue is furred, pulse quick and small; the skin hot and dry; no appetite, great thirst, and great prostration. In the worst cases the bowels become bloated and tender, the pulse weak, the tongue red, dry, and glazed, the evacuations are extremely offensive; hiccough comes on, with great exhaustion, followed by death.

Treatment.—This should depend upon whether it be epidemic or not. Cases which are not epidemic tend to recovery in the majority of cases. If the bowels have not been relieved by the discharges of all the contents, which have a tendency to keep up the irritation and aggravate the inflammation, they should be moved thoroughly by giving a full dose of Epsom salts, or Rochelle salts, or castor oil. For doses, see table of doses. The cathartic selected should be given in sufficient doses to produce free evacuations of the bowels, and then it should be discontinued. In some cases the above treatment seems to be all that is needed, as the dysenteric discharges do not return, and recovery takes place at once. But in cases where the discharges do return, repeat the cathartic after a few days. If the patient is quite feeble, use the castor oil; but if not, the salts are to be preferred. After the bowels have moved freely, opium in some form is the most reliable remedy for quieting the pain and checking the discharges, and should be given in full doses every four, six, or eight hours. For dose, see table of doses, with proportion for children. If it is thought best to repeat the dose oftener, on account of the frequency of the discharges, they should be diminished in size, so as to not receive more in quantity than one full dose every four hours. The cathartic should be repeated in two or three days if the disease continues, unless the patient should be very feeble; and the opium should be resumed after the cathartic has operated.

The principal reliance should be as we have advocated above; but there are various other remedies which do much good in many cases, such as subnitrate and subcarbonate of bismuth, gallic acid, tannic acid, kino, and several vegetable astringents; but these are not to be relied on, only in those cases where opium has an unpleasant effect upon the patient. The diet, especially in the earlier part of the disease, should be the blandest articles of food, and in small quantities,

until improvement begins to take place, when the quantity may be gradually increased, and should be nourishing articles, such as milk and animal broths. If the strength fail, brandy should be given the same as in all diseases where the symptoms indicate it by loss of strength. Quinine is often indicated in convalescence.

Epidemic dysentery is essentially the same disease as we have described and treated above, but is often very fatal, although it differs greatly at different times and places in this respect. Different epidemics vary in many respects, and so the treatment at times requires to be changed, according to the peculiarities of the case; but, as a rule, the treatment given above should be relied on.

In our early practice we were told by an old physician that many years ago he treated a large number of cases during an epidemic, and nearly every case proved fatal until he, by some means, happened to add a little calomel to the medicine given, and this patient, as well as all who took the calomel in this epidemic, recovered. The calomel, given in small doses, and repeated two or three times before giving the salts or castor oil, would be advisable in cases where the liver is deranged; but in the majority of cases this will not be necessary. The strength should be supported as we indicated above. Quinine is a very important remedy in many of these cases to sustain the patient. Also proper nourishment is very important.

Chronic dysentery requires different management in many respects. The subnitrate or subcarbonate of bismuth, in doses of twenty to fifty grains for an adult, and repeated four or five times a day, is one of the best remedies. Tannic acid and gallic acid, as well as some other vegetable astringents, are of more or less benefit. The above named medicines work better in the chronic form than opium, although the opium may be indicated in some cases. The surface of the body should be well protected; the diet should be nourishing, and composed largely of such articles as eggs, milk, and in some cases animal food agrees well with the patient. Tonic medicines, such as quinine and some preparation of iron, should be given to support the strength. Out-of-door exercise is important, as well as mental recreation. Change of climate often proves effectual when all other measures fail.

DYSPEPSIA.—This is a very common disease, and consists of a derangement of the organs of digestion.

Symptoms.—A sense of uneasiness in the stomach, especially when empty, and many times pain after eating, particularly if a full meal has been taken. The appetite is deranged, usually deficient. Eructations of sour gas, and often a throwing-up of undigested food, sickness at the stomach; costiveness, alternating with diarrhœa; furred tongue, foul breath, palpitation of the heart, headache, dizziness, low spirits, tongue covered with a whitish fur in the morning, bad taste in the mouth, and loss of flesh gradually occurs, with a pale sallow skin.

Causes.—The most frequent causes are the use of improper food, or eating two large a quantity; or, in many cases, by eating too fast, and thus not taking sufficient time to chew the food sufficiently; the use of alcoholic liquors or tobacco, excessive exercise, or study.

Treatment.—The most important part of the treatment is to remove the cause, by regulating the diet and correcting any other errors existing, such as we have alluded to above. The diet should consist usually of stale bread, mealy, well-cooked potatoes, with a small amount of good fresh beef or mutton, milk, etc. It is very important that the cooking be properly and well done. Tea and coffee should not be drank; but water is to be preferred. Five or six hours should intervene between each meal. Salt baths are useful. Proper exercise should be taken in the open air. The medicines required are not of so much importance as to regulate the diet, and to attend to other matters mentioned above. If there is a morbid sensibility of the stomach, use counter-irritation by applying mustard pastes, small blisters, or croton oil. If the patient be pale, ten to fifteen drops of muriated tincture of iron in a little water may be taken three times a day, after eating, rinsing the teeth each time, as it makes them rough if this is neglected; or, in place of the above, take two or three grains of citrate of iron and quinine. If constipation exists, take the Persian pills at bed-time, to move the bowels gently. (See page 96.) Sulphate of quinine, given in doses of one or two grains, and repeated two or three times a day for several weeks, acts admirably many times. In some cases five to ten grains of pepsin, given after each meal, does good. If water-brash be present (that is, a copious eructation of a watery fluid, accompanied with pain in the stomach), take from twenty to thirty grains of bismuth. If there be a collection of gas in the stomach and bowels, take a few grains of powdered charcoal.

Rennet-wine is an excellent substitute for pepsin, and may be made as follows: Take a fresh rennet and cut up into small pieces, and put into a pint of sherry wine; then allow it to stand for two weeks, shaking it occasionally, and strain, when it will be ready for use; dose, one-half to one teaspoonful, taken shortly after each meal.

An important part of the treatment is to use the Persian pills mentioned above, judiciously, whenever there is any constipation, to regulate the bowels and bring about a natural and healthy action of the liver, stomach, and bowels.

EPILEPSY (called by some Falling Sickness).—The leading symptoms of this disease are: sudden loss of consciousness, with spasms of the muscles, followed by exhaustion and drowsiness. After a certain length of time has passed the attack returns. Epilepsy usually arises from excessive nervous irritation, induced by disturbance of the stomach and bowels from the presence of worms, indigestible food, etc.; or, it may arise occasionally from a hereditary predisposition, sexual excesses, uterine irritation, or from other causes inducing excessive nervous irritability. Patients afflicted with this disease are usually troubled more or less with dyspepsia, constipation, great nervousness and depression, sleeplessness, leucorrhœa in women, etc.

Symptoms.—About five to ten per cent of the cases have some warning for a short time before the fit comes on; but in most cases the fit comes on suddenly, the patient screams loud, and at once falls to the ground senseless, with convulsions. The eyes are partly open, the eyeballs rolling, a gnashing of the teeth, foaming at the mouth, the tongue usually thrust out, and many times badly bitten; the skin usually cold and clammy, the breathing laborious, etc. The fit usually lasts from a few minutes to half an hour, but in some cases it continues for a longer time. One case which the author saw the day following a fit, was, as reported by the family, an extraordinary case; the fit continued nineteen hours from the commencement before it completely subsided; after this the patient was insensible, and apparently in a sound sleep for several hours, when he recovered gradually, but was much exhausted and somewhat delirious for a time. He was placed under treatment, and when last seen by me had not had a fit for several months, and had every indication of recovering completely if the directions were followed out.

Treatment.—During the fit the patient should be placed on a large bed, to prevent his being injured by the violent muscular exertions. Remove anything about the clothing which is too tight, especially the neckcloths, stays, etc. A piece of soft wood or a roll of linen should be introduced between the teeth, to prevent any injury to the tongue by biting. Cold applications to the head are recommended by some during the fit, especially if the face be red and congested.

To effect a cure the following directions should be carried out in the interval between the fits: Much care is required to avoid any excesses which may have a tendency to aggravate the disease. If the patient is liable to overload the stomach, see that this is avoided; if pale and weak, give a good nourishing diet, but be careful that too large a meal is not taken at any time to overload the stomach. If constipated, give from one to four of the Persian pills (described on p. 96), according to the age, or sufficient to produce one free evacuation of the bowels. Overtasking the mind or body in any way, the immoderate use of tobacco or alcoholic stimulants, excessive venery or other self-abuse, or, in fact, anything which is in direct contradiction to the laws of health, should be *strictly avoided.* We wish to impress upon the minds of our readers the *great importance of perseverance* in strictly observing all the laws of health, and in continuing the treatment we recommend, for years, if it is evident that this is necessary. Pay strict attention to the organs of digestion, and to the nourishment taken, that it be sufficient to nourish the body well; but be particular not to have an over-amount at any one time; also, be regular in eating, always having five or six hours between each meal, and never eat just before retiring for the night.

The remedy most to be relied on is the bromide of potassium, and should be given, to an adult, in doses of twenty grains, two or three times a day, and, if necessary, increased to thirty or even forty grains for a short time, when it may be left off for a few days, and then resumed in doses of twenty grains. For younger persons the dose should be proportionally smaller. The quantity may have to be varied more or less, according to how well it is tolerated, which will be ascertained after using it for a short time. Of course, if any disagreeable effect is noticed from the medicine, it should be discontinued for a few days, and then resumed in smaller doses and gradually increased, if this should be necessary to check the fits; and after it is ascertained what quantity is required to control the convulsions, if well tolerated, it should be continued for one, two, or more years, except at intervals of a few days. Cases are reported where two drachms were taken each day, and continued for two or more years; but usually one drachm (60 grains) is sufficient to take each day. It is well to give the largest dose taken during the day at bed-time, especially if the patient is unable to sleep well at night. Be particular to keep the bowels regular by a proper use of the Persian pills described on page 96, whenever constipated.

ERYSIPELAS (St. Anthony's Fire).—This is a redness or inflammation of some part of the skin, and frequently subcutaneous tissues, with fever. It is caused by a peculiar poison, and is not contagious. The affected part becomes of a deep red color, painful, hot, and swollen, with a tendency for the inflammation to spread. The integuments of the face and head are most frequently affected with erysipelas; but no part of the surface is exempt from an attack. Erysipelas which follows wounds commences around the surface injured.

In some cases redness and swelling is noticed on one side of the nose, which spreads over the rest of the face; the eyes become closed by the swelling, which extends to the lips, cheeks, and in fact extends over the whole or a part of the face and head, until all traces of the natural features are lost. By pressing the end of the finger down upon the inflamed surface for a moment, and then removing it quickly, it will leave the skin white where the pressure was, but the blood will quickly return to the surface, when it will look red as before the pressure.

Treatment.—The patient should be confined to the bed, and the room should be well ventilated. The diet should be light. Never apply cold to the inflamed surface, especially when about the head. If the bowels are constipated, give a dose of the Persian pills described on page 96, to produce free evacuation.

After the bowels have been moved by the cathartic, give for an adult twenty to thirty drops of the muriated tincture of iron, in a little water, and repeat every one to four hours, according to the severity of the case. The tincture of iron should be sucked through a straw or quill, to prevent its getting on the teeth, and the teeth should be rinsed if any gets on them, or it will make them rough. The inflamed surface should be surrounded by painting it with tincture of iodine, and pains should be taken to extend it on to the sound skin which is not affected; this will usually check the extension of the inflammation. After the inflammation and fever have subsided, the iron may be left off, and give in its stead six grains of iodide of potassium after each meal, and two grains of quinine half an hour before each meal. For children or delicate females give a proportionately smaller dose.

FELON. — This is usually a very painful affection, and consists of an inflammation seated either in the cellular tissue, the sheath of a tendon, or between the periosteum and bone. It is usually located on the thumb, fingers, or hand, and occasionally on the toes. The first symptoms are slight swelling, and a pricking sensation, with a deep throbbing. In some cases the bones and ligaments are seriously affected, leaving a stiff joint, etc.

Treatment. — The best treatment known to us, is to saturate a small piece of cotton with Kendall's Spavin Cure, and place it directly over the affected part; then place a small strip of cloth outside of this to hold it next to the skin. The cotton should be wet with the medicine often, and kept applied constantly until the affection disappears.

FEVERS. — It will be impossible for us, in the short space we have, to notice fully every variety of fever; but we will endeavor to give as much information as possible in the space allotted us for this purpose. As a rule, fevers should be treated by a competent physician; but we shall endeavor to give some light upon the subject in a general way, which will enable our readers to give valuable aid to the physicians while caring for their sick friends.

Fever may be defined as follows: unnatural heat of body, following, in most cases, a preliminary stage of languor, poor appetite, and chilliness, pulse quickened, debility, and the functions of the body disturbed; but many diseases or derangements are attended with a fever which is only symptomatic; this makes it quite important to inquire into the true cause which produced the fever, so as to ascertain whether it is an essential fever or only a symptom which occurs as the result of some other disease or derangement.

Symptomatic fever is that unnatural heat of body which follows, and is the result of some injury, or as the result of some fault or disease which brings on, sooner or later, inflammation; and the fever which occurs is secondary to the local affection, and is only a symptom which occurs as the result of the latter; whereas an *essential fever* is primary, and if local affections co-exist, they are secondary.

Essential fevers usually come on gradually; that is, there is a forming stage, and the invasion is not abrupt; but different fevers differ as regards the time in which the fever is developed; and they also differ as regards their cause, each requiring a particular causative agent which produces that fever and none other. The germ theory will, no doubt, in some future time, afford a clear and correct idea of the causative agent of all the essential fevers; but it is not at present thoroughly understood.

Fevers may be classified as follows: — *First:* A form of fever which is mild and short in its duration is called simple fever. *Second:* Certain fevers have a continuous febrile phenomena, such as typhus and typhoid fevers; these are called continued fevers. *Third:* Unlike the preceding class, certain fevers are distinguished by distinct paroxysms, and are known as periodical fevers; this class embraces intermittent and remittent fevers; also yellow fever and typho-malarial fevers are generally considered as belonging to this class. *Fourth:* Certain fevers are characterized by an eruption on the surface of the body, and are called *eruptive fevers*. Among this class are small-pox, scarlet fever, measles, and roseola.

Simple Fever. — This form of fever occurs quite often, and in all parts of the land. It lasts but a single day in some cases, but more often continues from three to ten days. This fever usually comes on abruptly; but, in some of the cases, weariness, loss of appetite, and general discomfort exists for two or three days, and then the fever is developed. The patient may be chilly when attacked, but it is seldom that a regular chill occurs. In some cases the fever seems to be more intense at the commencement than it does in typhoid fever. Pain is usually complained of in the front part of the head, in the loins, and limbs. The appetite is deficient. The bowels are generally constipated, and the urine is high colored and scanty.

It is quite difficult to distinguish this fever from typhoid fever, especially for any one but a physician; and it is very difficult many times even for physicians to do this. With proper care this form of fever rarely proves fatal.

Treatment. — If constipated, give a dose of the Persian pills described on page 96, to move the bowels; then give for an adult ten grains of nitrate of potash (saltpetre) every six hours, with sufficient cold water to satisfy the demands of the patient. Give Dover's powder, if required to relieve pain, or to cause sleep, ten grains for an adult, or a proportional dose for children. Observe the laws of health, and exercise good common sense in taking care of the sick.

FROST-BITE. — This is a state of numbness or torpefaction of a part of the body, caused by intense cold, which, if not relieved by proper treatment, is followed by the death of the part.

Treatment. — If the foot, hand, or any part of the body be frozen, care should be taken to produce *moderate reaction* by rubbing the frozen part gently with snow, or in the absence of the snow use *very cold water*, which will extract the frost gradually. Do not apply anything warm, as this would bring about too sudden reaction; nor is it advisable to take the patient into a warm room too suddenly. After reaction has been established, apply Kendall's Spavin Cure two or three times a day, to the frozen part, which has restored the part perfectly in every case we ever knew it to be tried for; and we do not hesitate to pronounce it to be the best remedy we know of for all frost-bites.

GALL-STONES. — These vary in size from that of a pin's head to that of a hen's egg, and are usually formed in the gall-bladder; but they have been found in the biliary passages. They exist in some cases in great numbers, while in others they are not as numerous; cases have been reported where 2000 or more have been found after death. They are usually of a brown, yellow, or a greenish color; but sometimes they are white. While they remain within the gall-bladder

they may cause no particular inconvenience; but if they accumulate in size or number, they may cause trouble by distending the gall-bladder, which might cause ulceration and perforation. If forcible pressure or percussion be made over the gall-bladder when distended with gall-stones, it will sometimes give rise to a noise like that produced by marbles in a bag when shaken. But, as a rule, their existence is not suspected until they pass from the gall-bladder to the intestines, which causes severe cutting pain over the region of the liver, and is a continuous severe pain, and stops abruptly the moment the gall-stone reaches the intestines. The time occupied in the passage is in proportion to the size of the gall-stone; it may be for a few moments only, or for many hours. Vomiting speedily occurs in many cases, and may be repeated frequently while the pain lasts. Generally there is more or less tenderness over the seat of the pain, but in some cases pressure affords relief. The pulse sometimes becomes much slower than natural, but as a rule it is not faster than in health. If the stools are carefully examined after the passage of a gall-stone, one or more may be found; but should they pass back into the gall-bladder, as sometimes is the case, of course none will be found. When one attack has been experienced, they may be expected to return again sooner or later, varying from a few days to months or years. Occasionally several attacks will occur in frequent succession, either in the same day or for several successive days. They are more apt to form in middle or advanced life, although they may form at any age. They are also more apt to form in females than males.

Treatment.—Morphine (or laudanum) should be given during the passage of a gall-stone, to quiet the intense pain, usually one-sixth to one-fourth grain; also warm hop bags or other hot fomentations should be applied over the seat of the pain. If it is decided to use the hops, place a quantity in a small bag sufficiently large to cover the space desired; then put into a pan of hot water, which should be kept hot, and the bag should be wrung out as hot as can be borne and placed over the pain. Two bags should be made, so that one can be placed in the hot water while the other remains on the patient, and they should be changed sufficiently often, so as not to get the least cold. The above treatment is of use only to mitigate the severe pain while the gall-stone is passing; but to remove them without pain the author has had excellent success with the following: one pint or more of olive oil, given every day for several days. Several cases treated by us in this way afforded permanent relief. The olive oil, taken at short intervals in quantities of four to six tablespoonfuls, until the above named quantity was taken, produced free evacuation of the bowels, and on close examination of all the discharges, a large number of gall-stones were found which had passed without pain. If possible, get the pure olive oil for this purpose. Any person who has a sallow complexion, or is afflicted with any derangement of the liver, should take the Persian pills described on page 96, to keep the bowels regular and to keep up a healthy action of the liver and bowels; and in this way thousands of lives might be saved, and many who go about half dead might enjoy good health. See treatment of CONSTIPATION. No pills yet discovered, to our knowledge, equals these for all such cases.

GOITRE. *Also called Bronchocele, Big Neck, or Swelled Neck.*—This affection is an enlargement of the thyroid gland, which lies over and on each side of the windpipe, as shown in the engraving. It may be soft or firm, or quite hard. It affects women only, and is not considered dangerous, but is often very troublesome and unsightly. The swelling is unaccompanied by pain, and as a rule causes but little inconvenience beyond the deformity which it produces.

Treatment.—Give internally, for an adult, the following: Iodide of potassium five grains after each meal, that is, get at a drug store one-half ounce of the iodide of potassium and put into six ounces of water, and take one teaspoonful at a dose. If the patient be pale, weak, or has a poor appetite, get, besides the above, one drachm of citrate of iron and quinine and put into four ounces of water, and take one teaspoonful half an hour before each meal, and the potassium after. Then the treatment which does most to remove the enlargement, is to apply Kendall's Spavin Cure twice a day; this, as well as the remedies given internally, has never failed to our knowledge, when persevered with for several weeks; but as they work slow, we caution our patrons about stopping the treatment too soon, for we think it will always cure if followed a sufficient length of time. No treatment will cure it in a short time. If the bowels are constipated, be sure to get the Persian pills described on page 96, and take them as directed in the treatment of CONSTIPATION, for this is very important in treating nearly every disease where constipation exists; and we know of no pill which is as beneficial as these pills are for this purpose in any disease.

HOOPING-COUGH.—This is a contagious disease, and occurs but once in the same individual. There is slight fever, with symptoms of a cold; the cough is peculiar, and occurs at uncertain intervals. Its duration varies from two to four weeks, and in some cases a considerably longer period.

Treatment.—In mild cases but little treatment is necessary, except to take good care of the patient, dress in flannels, keep indoors, etc. For cases which need medicine of any kind, the following usually works well: Take wine of ipecac one drachm, carbonate of ammonia one scruple, tincture of senega three drachms, syrup of squills two drachms, water five ounces; mix. Dose one or two teaspoonfuls every two or three hours.

The following is considered by many as very valuable: Carbonate of potassa two scruples, cochineal powdered one scruple, white sugar two drachms, water eight ounces; mix. Dose for a

child one year old two teaspoonfuls three times a day; two years old three teaspoonfuls; and four years old one tablespoonful.

HYDROPHOBIA. — This is quite rare; but when it does occur only a few of the cases recover.

Treatment. — This should be prophylactic; that is, an effort should be made to prevent it when a person has been bitten by a rabid animal. The wounded part should be cut out as soon as possible after the bite, taking care to remove every part touched by the animal's teeth, so as to leave a clean raw surface, and the sooner this is done the better; but it should be done, even if a day or more has passed. The wound should be thoroughly washed by pouring a stream of water over it for some time; and then some recommend applying nitrate of silver over the surface, and then treat the wound the same as any similar wound. After this disease is developed, remedies have but little curative power in stopping it; but it would be well to try sulphite of soda in doses of forty grains and repeated every four hours, which may do good, if any remedy will.

INFLUENZA. — This is an epidemic affection, and arises from some peculiar condition or contamination of the atmosphere. This poisonous influence spreads rapidly over the country, and affects a large number of children at the same time. It rarely stays in one section for more than six or eight weeks. Some seasons the disease is very fatal; but usually, if not complicated with other diseases, it runs a favorable course, terminating in recovery in from three to eight days.

Symptoms. — Among the symptoms of this disease are headache, heat of the skin, sneezing, running at the nose, throat more or less sore, hoarseness and troublesome cough, rapid breathing, and disordered stomach. In many cases there are also signs of prostration. The fever occurs suddenly. The danger is increased in an occasional case by the setting in of other diseases, such as lung fever or acute bronchitis, etc. This disease occurs mostly amongst children, but persons of all ages are attacked. Persons of more than forty years of age, and weakly persons, are those with whom it is most likely to prove fatal. This disease sometimes spreads so rapidly as to extend over many different countries, even if they are widely separated, in a very short time. The disease usually ends in free perspiration or diarrhœa. This is a peculiar species of fever, and not, as many suppose, a local affection of the lungs. While influenza prevails, other diseases are more apt to be severe. Influenza resembles a common cold, but is much more severe, and the patient is more prostrated.

Treatment. — In mild cases no drugs are particularly indicated; but care should be taken to keep the patient in bed, in a well ventilated room, but kept warm at about 75° Fah. Be careful not to allow any unnecessary exposure to cold. In the more severe cases apply a mustard paste to the lungs, if the cough is troublesome, and give some remedy which will be an expectorant and diaphoretic; that is, something to loosen the cough and produce slight sweating; for this give hive syrup or some good cough medicine. See receipts. If the urine is deficient and high colored, give small doses of sweet spirits of nitre. For dose, see table of doses with proportion for children. If constipation be present, give castor oil or the Persian pills (see page 96). If there is great prostration, give quinine, brandy, or whiskey, especially if the patient be old. Milk is one of the best articles for nourishment, and in very weak cases give beef-tea also. In most cases good care is the most important part of the management.

JAUNDICE. — This is a symptom, or the effect of a disease, characterized by a yellowish tinge of the skin and eyes, depending on the presence of bile in the blood. It is caused by diseases of the liver, obstruction to the free passage of bile into the intestines, etc.

Symptoms. — The most prominent symptoms are a yellow tinge of the skin and eyes; the bowels constipated, the urine is of a dark color or of a saffron tint, the tongue is coated with a yellow fur, pain, in some cases, over the liver, headache, etc.

Treatment. — If the jaundice is caused by a gall-stone obstructing the passage of bile, treat as we have recommended under the heading for GALL-STONE.

If constipation exists, give the Persian pills described on page 96, to move the bowels freely, and continue their use by giving one or two every night, or every other night for several days, or until recovery has taken place; but usually it is best to take the largest dose on the first night, and then one every other night for several days. If the bowels are not constipated, take one of the above pills every other night for several days.

The diet should be such as will be easily digested, avoiding fatty articles of food. A blister, mustard paste, or the application of Kendall's Spavin Cure over the liver, affords benefit in many cases. If there is considerable pain, one-eighth grain of morphine or two grains of extract of conium, may be given with benefit; many physicians prefer the latter. If the appetite and digestion are poor, give one teaspoonful of the tincture of quassia, or compound tincture of gentian in a little water, half an hour before each meal.

LAMENESS. — This may occur from a great variety of causes, and as those kinds of lameness which occur most frequently are treated in their proper places, we will only mention here that not only those which we treat in this volume, but every kind of lameness for which we have tried Kendall's Spavin Cure, has been relieved at once; and we sincerely believe that no remedy has ever been discovered which works so admirably, especially for the very worst cases, which yield to this remedy when all others fail. As we have recently refined Kendall's Spavin Cure expressly for human flesh, we refer our readers to the article on page 43 on "Refining Our Medicine."

LAME BACK.—This is usually caused by a strain and taking cold soon after, or may be from various causes, such as some difficulty of the spine, kidneys, etc. When any external remedy alone will afford relief, we believe that Kendall's Spavin Cure is the very best; but in some cases, especially if the kidneys are affected, internal remedies will be required also to restore them to their normal condition. We have known of cases of this difficulty which had existed for years, and where the patient had tried everything which could be found that was highly recommended, and had been treated by physicians and pronounced incurable, and after all other remedies had failed were cured with Kendall's Spavin Cure, by applying it over the location of the pain, and by continuing it for several weeks, or until after it had produced considerable irritation. From our past experience, we can conscientiously recommend the Cure as being the best remedy known to us for this purpose.

LAME JOINTS.—This may occur from various causes, such as rheumatism, sprains, etc. For treatment, see LAMENESS, SPRAINS, and RHEUMATISM.

LIVER COMPLAINTS.—It would be impossible for us to notice here, fully, all the diseases and derangements of the liver, as the short space allotted for this purpose will not admit of it; but we will endeavor to give all the information here that the unprofessional can put to practical use.

Deranged secretion of the liver is of frequent occurrence. It may be excessive, or deficient, or unhealthy. If the secretion is excessive, there will be copious stools of a bilious character; but, if it is deficient, they will be clay-colored and usually small; or, if unhealthy and deranged, they will be black or very green. Most of the cases of this sort improve rapidly by giving the Persian pills noticed on page 96, in sufficient doses to produce free evacuation of the bowels, and then by continuing to give one every other night at bed-time for several days, to bring about a healthy condition of the liver.

Congestion of the liver occurs frequently, and often causes enlargement of the liver. There is a sense of oppression, lowness of spirits, furred tongue, nausea, and loss of appetite; impaired digestion, a bitter taste in the mouth, pain in the head, a sallow complexion, a sense of weight and sometimes pain over the region of the liver, are symptoms attributed to congestion of the liver. Cases of this kind are often afforded greater relief by visiting Saratoga Springs for two to four weeks than by any drugs that might be given. If the above plan is adopted, the Hathorn or Empire water should be taken, about half an hour before breakfast, in quantities of two to four glasses, or sufficient to move the bowels freely; or use the Persian pills as above.

Acute inflammation of the liver may affect either the substance of the liver or the membrane investing it, or one or all the lobes. The symptoms are: sharp pain in the right side, or sometimes it is a dull pain in the right side and shoulder, or between the shoulder-blades, yellowish or pale complexion, loss of appetite, depression of spirits, constipation, a sense of uneasiness at the stomach, nausea, vomiting, short dry cough; the urine high colored, and deposits a reddish sediment after standing a while. This rarely occurs, excepting in tropical climates. *The treatment* should be, to give the Persian pills described on page 96, and continue to give one every other night, or more if necessary, in order to keep the bowels sufficiently loose; or, some would give one-half grain of calomel every two hours, until five to eight doses had been given, then give a full dose of Epsom salts, say one large tablespoonful, the next morning after the calomel has all been given as above. After this, give remedies to keep up a slight perspiration; one-fourth to one-half grain of ipecac will do very well for this purpose, repeated every three or four hours. If the inflammation should go on to suppuration, it will be indicated by a chill; and in this case the patient should be supported by good nourishing food and tonics, such as two to four grains of citrate of iron and quinine, repeated every four to six hours. If there is considerable pain and restlessness, give one grain of opium. If the bowels should again become constipated, give the Persian pills as above, in doses to act gently upon the bowels.

Chronic inflammation of the liver is of long standing, and is denoted by more or less pain and tenderness, or fulness, with a sense of weight in the right side; with depression of spirits, emaciation, and sallowness of the skin. It may be due to long residence in an unhealthy climate, disease of the heart, intemperance, or in consequence of acute inflammation. In some cases the liver increases greatly in size, and may be felt low in the abdomen; but in some cases it will be shrunken in size. In addition to the above symptoms, there may be in some cases pain in the stomach, with flatulency; the tongue coated, indigestion, the white of the eyes and sometimes the skin is of a yellow color; stools clay-colored, and the patient gradually becomes emaciated. In the *treatment* of this form of liver complaint much can be done to afford relief by avoiding any errors in regard to living too freely; or, in other words, have a plain nourishing diet, and avoid eating too much at any one meal; also avoid all spirituous liquors. Use the Persian pills mentioned on page 96, to keep the bowels regular, and to produce a healthy and natural action of the liver and bowels. No remedy is yet discovered, to our knowledge, which works so well as these Persian pills for all liver complaints, or any chronic disease where the bowels are constipated.

Sick-headache is usually caused by an improper diet, such as eating rich food, melted butter, rich pastry, rich gravies, fat bacon, and many other articles which contain too much grease; or any indigestible food which is taken in large quantities by a person who already has a tendency to biliary disorders; or it may be caused by indulging too freely in spirituous liquors. To avoid the above unpleasant difficulty, be careful not to indulge too freely in the particular articles which cause it. Deficient exercise may also be an exciting cause in some cases. Persons who are liable to biliary disorders, on account of derangement of the liver, should be particular in

regard to their diet; they should always avoid taking spirituous liquors, tea, or coffee; they should take sufficient exercise in the open air, keep the skin clean by bathing often, and the diet should be plain. Keep the bowels regular by a proper use of the Persian pills, described on page 96, as we prefer these to any other physic known, such as calomel, etc. We have recommended calomel above in two or three instances, and we are well aware that many will criticize this treatment. On account of the excessive use of this remedy by many old physicians a few years in the past, much mischief was done; but the reason why this was so, was that they used it in large doses, and also used it indiscriminately. Where we have recommended calomel it will usually work admirably; but, if any one should through prejudice prefer not to use it, the following are the best substitutes: Proto-iodide of mercury pills, one-fourth grain each, can be taken, one at bed-time, for ten or fifteen days; this is an excellent remedy, especially for all liver derangements of long standing. Mandrake and dandelion are among the best vegetable remedies for liver disorders; for doses, see table of doses. The Persian pills are composed of the *best* vegetable extracts known to the medical profession, and are the best pills known, and they are free from calomel or any other mineral.

LUMBAGO. — This is a species of rheumatism, affecting the muscles about the loins. For treatment, see RHEUMATISM.

MEASLES. — This is a contagious eruptive fever. The symptoms resemble those of an ordinary fever, with the addition of the following: running of the nose, sneezing, hoarseness and cough, soreness of the throat and lungs, followed by swelling of the eyelids, with eyes watery, and intolerant of light, great heat of skin, with a frequent hard pulse, headache, bleeding at the nose, sickness at the stomach, etc. The eruption usually appears on the fourth day, and occasionally later; it appears first on the forehead and face, and gradually extends down over the body. The rash consists of small, red, circular dots, resembling flea-bites, and gradually run into small blotches, which begin to fade on the seventh day, and is followed by a peeling off of the cuticle in small scales and attended with great itching. No age is exempt from an attack of the disease. Complications are liable to occur which renders the disease more liable to prove fatal than when it runs its natural course.

Treatment. — Great care should be taken not to allow any exposure to cold. In ordinary cases the treatment should not be too active; but the patient should be confined to bed in a room kept at about 75°. If constipation exists, give gentle cathartics, of which rhubarb is best in most cases. Milk diet is perhaps the best nourishment. If the cough is severe, apply mustard pastes to the chest, and give the following: paregoric one ounce, wine of ipecac one-fourth ounce, compound syrup of squills one-fourth ounce; mix. Dose for an adult one teaspoonful, and children in proportion to age. Secure good, pure air in the sick room by proper ventilation. To protect the eyes darken the room moderately. Pay strict attention to the laws of health after recovery, to avoid any difficulty from scrofula or consumption, which sometimes occur after this disease. Have the clothing warm and do not go out of doors too early.

Caution. — Be particular not to allow the patient to be exposed to the cold from the time the first indications of the appearance of the disease until some time after the patient is entirely over the disease. Do not give active cathartics, and do not give even mild cathartics, only when constipation exists; then give either rhubarb or small doses of the Persian pills noticed on page 96.

MUMPS. — This is an inflammatory affection of the parotid glands. It is contagious, and occurs but once in the same patient. The first symptoms are a slight fever, with swelling and soreness in one or both glands, located below the ear and angle of the lower jaw, and extending along the neck to the chin. After four days the disease begins to decline.

In ordinary cases no treatment is necessary; but in all cases the patient should be careful to avoid exposure to cold. Let the diet be mostly of milk. Apply a flannel to the throat, and keep the patient in-doors in a moderately warm room.

NEURALGIA. — This is a very painful affection, which may come on abruptly, without any symptoms preceding it; or there may be preceding the attack a feeling of weight, a sense of heat, or some uncomfortable sensation in the seat of the affection. The pain is usually either in the trunk or branch of a nerve, and is much more severe at some times than at others. If the pain is continuous, it may be dull; but when it comes on more severe, it is liable to be of a darting, tearing, and cutting, or excruciating character. At times, when the severe paroxysms occur, the severe pain may subside in a few seconds or minutes, or it may continue for several hours or days. The pain usually extends along the branch or trunk of a nerve. In most cases neuralgia is only on one side. This disease has no fixed duration, and may, in some cases, end either under the influence of treatment, or otherwise, in a few hours or days, or it may continue for years. Neuralgic pains may proceed from a lesion of some sort extending to the nerve, or from pressure of the nerve, or it may proceed in some cases from malaria, and when this is the case the pains usually recur with the same regularity as the fit of ague, although this is not always the case. Many who are affected with neuralgia are also affected with anemia, which seems to be a predisposing cause. It occurs most frequently between the ages of twenty and fifty, and oftener in the cold than in the warm seasons of the year.

The situation of the pain is not always a sure indication of the location of the lesion giving rise to it, as the pain is frequently felt along the branch of a nerve, while the lesion giving rise to it may be at the trunk of the nerve, or where it unites with the spinal cord. This is the reason why persons who have had limbs amputated frequently have pain or other sensations which they refer to the part which has been amputated.

Neuralgia is most likely to be confounded with rheumatism; the chief distinction be these diseases is, that in neuralgia the pain follows the course of a nerve or its branches, in rheumatism it is usually in the joints.

Treatment.—In the treatment it should first be ascertained just where the lesion is, which gives rise to the pain, by pressing with the end of the finger along the course the nerve, and then apply Kendall's Spavin Cure, either the refined for human flesh, or the fined, whichever is most convenient. If the pain is intense, twenty-five drops of tinct opium may be given to an adult, in a little water, to assist in quieting the pain.

If the cause is suspected to be malaria, give the Persian pills (see page 96), to clear bowels, and then give four grains of sulphate of quinine every four hours, until four or losses have been given; then give half as large doses less frequently, until six or eight doses been given. If the patient is pale and weak, give two-grain doses of citrate of iron and qui half an hour before each meal, instead of the smaller doses of quinine recommended above, give a good nourishing diet. Flannel should be worn next to the skin, and the other dr should be warm and comfortable. In *sciatica*, chamois-skin drawers should be worn ins of flannel, and bathe the part over the location of the pain, which is usually just back and below the hip-joint, with the Kendall's Spavin Cure, and rub it with the hand until it strike This is the very best local application known to us, and is attended with the very best re when the above directions are followed.

If the case should be associated with rheumatism, give in addition to the above, six grains iodide of potassium after each meal, three times a day; but if the attacks come on periodic like ague, give the quinine as recommended above, and use the Persian pills to keep the bo regular, and to bring about a natural and healthy action of the system. See page 96.

PAIN IN THE BACK.—This is a symptom of an affection of the spine, kidneys, m cles of the back, etc., and should be treated as directed, in another part of this book, for sp cases which do not yield to local treatment. The best local treat we have ever seen tried for this symptom is to bathe the back with Kendall's Spavin Cure two or three times a day. Also use Persian pills, noticed on page 96, to regulate the system.

PAIN.—Pain in any part of the body is, of itself, not alw sure guide in deciding as to what causes this symptom; and y many this is the only symptom which they recognize; and to a any patient who is afflicted with pain, either deep-seated or not, wish for a safe remedy which will help them and relieve the pain would say that we have used Kendall's Spavin Cure for almost conceivable pain, and we know of no remedy which is so well ada to every case of this kind as this remedy, and we feel certain it give entire satisfaction when applied externally over the seat of p

QUINSY.—This is an inflammation of the throat, and is ac panied by fever, pain, and considerable swelling of the tonsils, w is, in some cases, so much as to cause the liquid to return throug nostrils on attempting to swallow. The tongue is heavily coated. patient swallows with difficulty. Usually the inflammation ru certain course and terminates favorably in a few days, but leavin tonsils enlarged. In severe cases, especially if prolonged, it is to lead to suppuration in one or both of the glands. The pa usually very severe until the abscess bursts or is opened. It is ca generally by cold, and is more liable to occur to those who have suff with previous attacks. It is not contagious.

Treatment.—Keep the patient in a warm, well-ventilated room, and apply hot fomentat Give the Persian pills mentioned on page 96, to move the bowels freely, and repeat the do necessary, on the second or third day. Apply Kendall's Spavin Cure to the throat two or times a day. Give the following fifteen minutes after nourishment each time: Take iodi potassium one-fourth ounce, water eight ounces; mix, and give half to one tablespoonful dose, with smaller doses for young persons. Also give a powder of one or two grains of qu twenty-five minutes before each meal. If the tonsils remain permanently enlarged, apply Spavin Cure, and give the potassium and quinine as recommended above, for some time.

RHEUMATISM.—This is a very common disease, and one of the most painful severe diseases of this country. It arises from an abnormal condition of the blood which duces a most painful and distressing disease, especially in the acute form. The parts frequently affected are the joints and surrounding structures.

Acute Rheumatism, or Rheumatic Fever, called by some Inflammatory Rheumatism, is of the most painful diseases which the human family is afflicted with.

Symptoms.—Intense fever and restlessness, aching pain in the limbs, stiffness of the jo which soon become swollen and tender, especially the large joints. The pain becomes so int that the patient cannot or dare not move, and is a pitable and helpless spectacle. The puls quick and full; secretions are acid; tongue moist, but thickly furred. The pain suddenly le one joint and attacks another, and is liable to shift frequently, and sometimes shifts to the m branes of the heart, which is a very serious change. It rarely occurs in the very young or people.

Cause.—The most frequent cause is exposure to cold and damp after perspiring freely, especially if the person has previously had an attack of rheumatism.

Caution.—No person, whether they have ever had an attack of this disease or not, should sit down or remain quiet in a draft of air after getting their blood well heated up and while you are perspiring; but you should always put on more clothing while you are cooling off, and keep out of the wind. If you cannot do this, do not remain still, but keep moving so as to cool off gradually.

Treatment.—Relieve the severe pain by giving, for a grown person, twenty-five drops of tincture of opium; then give from one to two drachms of bicarbonate of potassa or bicarbonate of soda every three or four hours; but if the above cannot be obtained easily, give the same amount, which would be about half a teaspoonful, of saleratus in its stead, which, if pure, will answer perhaps as well. After the secretions are rendered alkaline, which will usually be the result after giving the saleratus for twenty-four hours, the dose should be reduced in size and only repeated once or twice in the twenty-four hours. Usually a good plan is, after two or three doses of the saleratus has been given, to give fifteen or twenty grains of saltpetre (nitrate of potassa), in place of every other dose of the saleratus.

After trying the above plan for twenty-four to forty-eight hours, if the symptoms are not relieved, give fifteen to twenty-five grains of salicin every two to four hours, according to the severity of the symptoms. Lemon juice is an excellent remedy in many cases if taken in large quantities. The affected joints should have local treatment, of which the best we have any knowledge of is Kendall's Spavin Cure, which has been refined expressly for human use; although that put up for horses can be used if preferred, or if the refined should not be readily obtainable. Bathe the affected joints by moistening the surface well with the Cure, and rub it gently until it has been absorbed, and then wrap the joints in a warm flannel cloth, and repeat this two or three times a day. During convalescence, if the disease remains stationary in one or two joints, apply the Spavin Cure freely, and give internally four grains of iodide of potassium every six hours, and give also one grain of quinine three times a day, about half an hour before taking nourishment. If constipation exists, give the Persian pills described on page 96, to obviate this, and to assist in correcting all the secretions.

Chronic Rheumatism.—This form is sometimes the result of the acute form of the disease, but is more frequently a separate constitutional affection, and coming on independent of any previous attack. It usually is apt to fix upon the joints and its membranes. There is no fever, but usually a dull pain in the affected part, which is worse in cold, damp weather, and at night. The joints are liable to become stiff and swollen. It is quite common among those in middle life and in old age.

Stiff or wry neck is a variety of this disease, and is generally caused by sitting in a draught.

Sciatica is due to the disease affecting the sciatic nerve.

As rheumatism is so common in this country, we think a further description of the disease will not be necessary.

Treatment.—The following treatment, when persevered with, has been proved to be the most successful of any treatment ever used in this country, and is as follows: bathe the affected parts freely with Kendall's Spavin Cure, either the refined for human flesh, or the unrefined, as is most convenient, and rub gently with the hand. We recommend our patients to always wear flannel underclothing; and if the joints should be very painful and swollen, it would be well after each application of Cure to apply a flannel bandage.

In addition to the above means, you should always attend to the general health by promoting good digestion, natural sleep, etc. Get the following put up at any drug store, and take about half an hour before meals for several days, or in very bad cases for weeks, if it should be necessary: Take iodide of potassium five drachms, macrotin half a drachm, good gin eight ounces; mix and shake well; take one teaspoonful before eating, three times a day. If the patient should be pale and feeble after following the above treatment, until they are free from pain, then get one drachm of citrate of iron and quinine, and four ounces of good whiskey or gin; mix, and take one teaspoonful half an hour before each meal until the patient is strong and healthy. Until the discovery of Kendall's Spavin Cure having such wonderful power to control this terrible disease, the treatment has been quite unsatisfactory; but we feel confident that if the above directions are followed out strictly, that the worst cases which were hitherto considered incurable will readily yield to this treatment. If the bowels are constipated, give the Persian pills described on page 96, to regulate the bowels and all the secretions.

SCARLET FEVER. (Also called Canker-rash or Scarlatina.)—This disease is well known to most people, and may be defined as a contagious fever, which is characterized by a morbid redness of the skin and mucous membrane of the fauces and tonsils, which makes its appearance about the second day of the fever, and begins to leave about the fifth. It is essentially a disease of childhood, and occurs most frequently at three or four years of age, and is less apt to occur as the age advances, rarely affecting persons of more than forty years of age. The scarlatinal poison is of a subtle nature, and is transmitted in the clothing or other articles remaining for a short time in the sick room. This disease varies very much in different cases as regards symptoms and fatality. In its mildest form it is a trivial affection seemingly; in its severest form there are few diseases more malignant. There are three varieties which are essentially the same disease, and yet they differ *widely* as respects their gravity.

Symptoms.—The attack may commence with a chill, but many times it is absent. Vomiting is usually an early symptom, especially with children, and with some cases they are affected with

diarrhœa in the start. The fever is generally much greater than in other eruptive fevers. The throat and tonsils are very red, with soreness and pain in swallowing, although in some cases the latter is absent. As regards the intensity of the fever, pain in the head, prostration, and general uneasiness, different cases differ very much.

The average duration of the first stage is usually about twenty-four hours, and then the eruption appears usually on the second day; but may, in some cases, appear a few hours after the attack, or in other cases may be delayed one, two, three, or more days after the time in which it generally appears.

The eruption does not appear with the same regularity that it does in measles or small-pox. It oftener appears on the breast and other parts of the body and limbs before making its appearance on the neck or face; but in some cases it makes its appearance on the face and neck first. It rapidly spreads until it covers the whole surface in about twenty-four hours. The redness is scarlet; but it does not cover the entire surface like the redness of erysipelas; but, if examined closely, patches will be discovered studded with points which have a deeper red color. If the throat affection is unusually severe, the rash upon the surface is apt to be slight. In some mild cases there is little or no throat affection; but in the vast majority of cases the throat is more or less affected. In most cases the tonsils are swollen and covered more or less with a white or ash-colored exudation commonly called canker.

The tongue is generally coated early in the commencement of the disease, and usually little red dots will be seen projecting through the coating. As the disease progresses, the coating disappears, leaving the tongue very red; and the red dots projecting give the tongue very much the appearance of a ripe strawberry. After the eruption takes place, the fever is increased as a rule. The increased heat of the skin and frequency of the pulse are more marked than in any other essential fevers. The pulse varies from 100 to 140 per minute, and the gravity of the disease is indicated in some degree by the frequency of the pulse. The temperature under the arm increases to 105° Fah., and in very severe cases it has been known to reach 110° Fah.

The duration of the stage of eruption is usually from four to six days; but is sometimes shorter, although it is more apt to be extended to eight or ten days. As the eruption disappears, the outer portion of the skin peels off, sometimes in small flakes, and at others in large pieces. At this stage of the disease the fever begins to diminish, and corresponding improvement takes place in other symptoms. The above description of scarlet fever applies to cases which are either mild or not extremely severe, and in which the course of the disease is regular, or at least without complications; but certain cases are extremely grave from the start, and may have complications which would render it quite important that the case be cared for by a good experienced physician, and therefore we shall not notice all the complications liable to occur.

It is the opinion of many that the kidneys are oftener affected after mild than severe cases of scarlet fever; this particular feature of this disease makes it very necessary that the patient be watched closely for at least three or four weeks after the fever subsides, so as to avoid taking cold. The mildest case ever treated by the writer, was a child about four years of age; and, although we took special pains to impress upon the minds of the parents the importance of watching the child closely for a month, the parents became careless after two weeks and allowed it to play out on the damp ground, and in two days it died from the effects of the complication alluded to above. We desire to impress upon the minds of all who read this, the great importance of this caution. An ounce of prevention is worth more than a hundred pounds of cure in these cases.

The time between exposure and the attack rarely exceeds six days, and several prominent writers claim to have seen cases in which the attack took place in one or two days after exposure. Some seasons this disease is of a mild type, while in other seasons it is very severe. The disease, with proper management and care, usually terminates favorably, and yet there is, perhaps, no disease which is so uncertain in its termination. In severe cases the symptoms which denote great danger are: very frequent pulse, reaching above 140 per minute, excessive fever, prostration, delirium, and a constant tossing from one position to another. When the above unfavorable symptoms are noticed you should call a physician at once.

Treatment.—Mild cases do not call for active treatment, but should be watched closely all through and for a month after the fever subsides, as we have already stated above. The mild form of the disease requires but little treatment, excepting to confine the patient to the bed-room, proper clothing, spare diet, plenty of cold water, with a little vinegar added, and mild laxatives, if there is constipation; but, as a rule, cathartics should not be given. The air in the sick room should be kept as pure as possible; but exposure to cold should be avoided both during the progress of the disease and also during convalescence; but care in this respect should not lead to the error of keeping the room too hot, nor by putting on an overplus of clothing.

When the patient is extremely hot and feverish, and the rash does not appear as soon as it should, the tongue much coated, with perhaps some irritability of the stomach, the author has found that five or six grains of ipecac given to a child four years of age, would produce free vomiting, cause the child to perspire, and the rash would appear soon after, with a general improvement in all the symptoms. After the rash has once made its appearance, care should be taken not to allow the patient to get cold. In regard to the throat affection, chlorate of potash is considered the best internal remedy, and should be used by putting one ounce into a pint of water; and after all has dissolved that will, use it as a gargle, if the patient is old enough to do so; if not, apply to the throat with a small swab, and also give half a teaspoonful occasionally to be taken; then apply Kendall's Spavin Cure to the throat externally, two or three times daily, *using the refined* if it can be had conveniently, but if not, the unrefined will answer. Different

ay recommend different remedies to be applied externally; but we know of no h begins to equal the Cure when used as above.
ent may be allowed to take small pieces of ice into the mouth, as much as they allowed to take iced drinks freely. For young children, the ice should be confined auze bag, which can be held in the mouth. For the extreme itching of the skin, in some cases, apply lard by taking the rind of bacon and passing it over the sur- ine or vaseline will answer the same purpose, and when they can be had, will be pleasant to use. Voluntary exposure, as is sometimes practised, should never be e course of this disease being so uncertain, we think it best, usually, to employ an physician; but with some experience in this disease, and by following above treat- ses will terminate favorably.

CA.—For description and treatment of this affection, see NEURALGIA and RHEU- all cases of this painful disease, when there is constipation, give the Persian pills page 96, to regulate the bowels and produce a natural and healthy condition of the

ULA.—A disease in which one of the chief characteristics is chronic swelling of t glands, especially the glands of the neck, rs and under the chin, and which tend slowly suppuration. Persons of all ages are affected young persons who are the offspring of tuber- s, or whose surroundings are contrary to the , are most likely to be afflicted with it. Scrof- s are quite apt to be afflicted with inflamma- tions, particularly of the lym- phatic glands, skin, mem- branes, and also the delicate membrane covering the bones, and these inflammations are of a chronic character. The relation between scrofula and tuberculosis is claimed by many to be quite intimate.

Treatment.—This will vary considerably in different cases, and depends, to some extent, upon the local manifestation of the disease. In most cases, the following prescription should be given for a long time, as it is impossible to effect a cure, as some expect, in a few days: Take iodide of potassium one ounce, fluid extract of sarsaparilla eight ounces, water two ounces; mix the iodide of potassium and water, and shake until dissolved, and then add the sarsaparilla; and give for an adult one teaspoonful half an hour after each meal. If there is local swelling of any part, apply Kendall's Spavin Cure twice a day. If there is any ulcerated surface, cleanse it with castile soap and water, and then moisten the surface with the Spavin Cure or the following solution: take carbolic acid one drachm, pure water one pint; mix, and shake well. Give a good nourishing diet, such as good fresh beef, eggs, pure milk, etc. Observe all the laws of health strictly. Sea air and bathing in salt water is very beneficial; but if circumstances are such that the patient cannot spend a few weeks at the sea-shore, he should add a large handful of salt to the water he bathes in at home. Keep the bowels regular by a proper use of the Persian pills described on page 96.

-POX.—This disease is very contagious, and is due to a specific poison. The acked about twelve days after exposure. The patient is attacked with fever, head- e, vomiting, and pains in the back. After three days there is an eruption of small which inflame and suppurate in the course of a week. If the pain in the back and violent, the disease usually is severe. The pimples appear first on the face, neck, on the body and lower extremities. About the ninth day the pustules break, and nd in four or five days more the scabs begin to fall off. In some cases the eruption to run together so as to lose their regular circular form, and it is these cases which gerous. Various complications are liable to arise in the course of the disease which ttention of a physician.
e out of every three who have small-pox without ever having been vaccinated, die ase; but of those who are careful to attend to this important precaution, if attacked y in the proportion of about one out of every forty or fifty; and when we consider

that vaccination affords protection against attacks of the disease for a certain length of time, in most cases, we should all endeavor to secure this protection by vaccinating promptly, whenever there is any liability of being exposed, especially if two or more years have passed since the operation had been resorted to.

An old method of vaccinating which is much used at the present time.

Treatment.—In most cases, drugs are of little benefit. The patient should be confined to the bed, in a well-ventilated room, in which the air should be kept moderately warm. Cathartics should not be given; but if constipation exists, give injections of warm water, with a little salt and suds made from castile soap, to move the bowels gently. The diet should consist at first of gruel, arrow-root, and other light articles of diet, and later milk and beef-tea should be relied on. If the eruption does not appear as it should, or is tardy in maturing, some have claimed to have excellent success by giving rum, gin, or whiskey quite freely. The sick room should be *well ventilated;* but be careful not to expose the patient to cold or damp air. The hygienic management, which is of so great importance in the treatment of typhoid and other fevers, should be regarded in this disease. Drugs are not of much importance in this disease excepting to palliate any unfavorable symptoms which may arise; but good care is of great importance. Give plenty of lemonade, cold water, barley-water, etc.; but be careful not to give the lemonade or other sour drinks near the time milk is taken, as it would be liable to turn the milk in the stomach.

SORE THROAT.—The term sore throat is used by most people to designate an affection of the throat, caused by taking cold.

Treatment.—As some might include under this heading the diseases known as QUINSY and DIPHTHERIA, we would say, for treatment of those diseases see Index for each, which are treated in their proper place. Apply Kendall's Spavin Cure to the neck, outside, two or three times a day, and if a very bad case, apply a flannel cloth to the neck, and if the throat is cankered inside, use the following gargle several times a day: Take chlorate of potassa one ounce, water seven ounces; mix, and add one ounce of muriated tincture of iron; shake well, and gargle every two or three hours, remembering always to wash the teeth well after using the gargle, as the preparation of iron will injure the teeth if not washed each time.

SPRAINS.—A sprain or strain is an injury of a joint caused by a partial dislocation, and occurs at the ankle or wrist joints most frequently; but may occur at any joint. Although it is not really a dislocation, yet it is often more painful and troublesome, and requires a longer time to recover from, than a dislocation or fracture.

Treatment.—If the part is very hot and inflamed, apply cold cloths wet in ice-water for several hours to reduce the inflammation, and then apply Kendall's Spavin Cure, which has always proved to be the very best remedy we have ever known to be used, as it relieves the pain and reduces the swelling, and restores the natural state of the joint, when other remedies fail and would perhaps leave a stiff joint, which never occurred in any case we ever knew where Kendall's Spavin Cure was used. (See article on Refining our Medicine, Page 43.)

STIFF JOINTS.—It frequently happens that one or more the joints become stiff from neglect or improper treatment of rheumatism, and frequently fr other causes which it is unnecessary to detail here.

Treatment.—The treatment of stiffness in the joints depends upon the condition of

general health of the patient. For most cases the following application alone is a sure nd the best that can possibly be adopted: apply two or three times a day Kendall's Spavin e stiff joint, and rub in well with the hand, and persevere with everal weeks, or for several days after it produces enough so as to cause considerable smarting at each application. In ling difficulties, like most cases of this kind, it is necessary to with the treatment as stated above. For the benefit of our e would say, usually after applying Kendall's Spavin Cure to sh faithfully for from one to three weeks, two or three times a ll produce a little breaking out or fine rash where applied; rash appears it causes considerable smarting when the re is applied over this same surface; but to get the very best old and bad cases it should be applied in this way for several r the rash appears, even if it should cause considerable

LLING OF THE KNEE-JOINT.—This may occur from uses, such as strains, rheumatism, white swelling, etc. For of the former, see SPRAINS and RHEUMATISM. For treatment of lling, give internally syrup of iodide of iron, twenty drops in a r after each meal, and if the patient be young, give for four ge five drops, and for ten years of age give ten drops, or for any in proportion. Also give bitter tonics, if the appetite be poor; od nourishing diet. Locally, we know of no remedy which equal Kendall's Spavin Cure applied two or three times a day, ved up for a long time, even for some time after considerable s produced. Keep the bowels regular by a proper use of the ills described on page 96, which will produce a beneficial n the whole system.

HOID FEVER.—This fever occurs most frequently in It attacks the rich and poor indiscriminately. It is caused by ul gases which come from drains when stopped up, or from of an individual affected with typhoid fever; also by the drinking-water becoming ted by the decomposing sewage making its way into the well.

toms.—Certain symptoms precede the attack in a part of the cases, such as a sense of and general uneasiness, headache, especially in the morning, dullness of intellect, heat or chilliness, furred tongue, pulse accelerated, and a tendency to diarrhœa. The ptoms may occur for a few days, and occasionally for more than a week, when the ushered in by a chill followed by fever. The pulse ranging from 90 to 120 per ut usually is less than a hundred. There is a dull, heavy expression, pain in the t, and limbs; bleeding from the nose, restlessness with a want of sleep, and diarrhœa w watery discharges, thirst and loss of appetite. The urine is high-colored and d in quantity. In severe cases the pulse rises above 120, is feeble and irregular, offensive, the breathing hurried, the tongue dry and brown, or red and glazed; the d and parched; great depression, and usually the abdomen is tender. These symp- me aggravated each day. In eight or ten days rose-colored dots appear in most e abdomen, and remain for two or three days, when they disappear and are usually y a fresh crop. The second week the following symptoms may occur: sleepiness y slight delirium, which frequently becomes violent; ringing of the ears, or deafness, pains in the muscles, and great debility, etc., etc. The mildest cases cannot be looked eing free from danger, nor on the other hand are the worst cases to be considered fatal. Among the most unfavorable symptoms are deep sleep, stertorious breathing, the limbs, profuse diarrhœa, hemorrhage from the bowels, delirium, bloating of the eat prostration, etc.

ment.—It has been claimed by some that they have cut short attacks which they had on to believe would have resulted in typhoid fever, by adopting the following plan: it was noticed that the patient had the premonitory symptoms, a full dose of the Per- were given, such as described on page 96, (three or four for an adult, two for a person rs old, and one for a child from six to ten years old.) After the pills had moved the ely, the patient was given warm drinks and covered up warm in bed until free perspi- k place; then sulphate of quinine was given in doses of four grains to an adult, and very four hours for one day, and then diminished in size, and not taken as often. If at the quinine should cause ringing in the ears, it should be left off, at least until this has subsided, when it may be resumed in smaller doses.

the fever has become established, the treatment should be a mild laxative such as the ls mentioned above; five to twenty drops of turpentine, given in mucilage made by gum arabic in water until it is quite thick, and given when the tongue is dry and the symptoms marked. Ten to twenty-five drops of the diluted sulphuric acid is given results during the fever. As the disease advances and the strength fails, quinine, d concentrated nourishment, like beef-tea, milk, and eggs, are indicated. The nourish- ld be given at intervals of two to four hours, and should be given in alternation. As it portant that a physician should treat this disease, and as our space is so limited, we ght best to omit the treatment in detail, which would necessarily be lengthy.

TOOTHACHE.—This may be caused by a decayed tooth; but pains occur which seem to be in the teeth, and yet the teeth, to all appearances, are sound. Other cases occur where the tooth looks sound, to all outward appearance; but when the patient shuts the teeth together, the tooth which aches appears to be longer than the others, and biting anything with this tooth causes pain, on account of an ulcer on the root.

Treatment.—While it is true that many teeth should be pulled when they ache, it is equally true that many are extracted which might be kept for years by having them properly filled, etc. The best remedy to stop toothache is to apply Kendall's Spavin Cure to the tooth by putting a small piece of cotton batting, saturated with the Cure, into the cavity, and bathe the outside of cheek and gums opposite the tooth, and after the pain is stopped, call on a good dentist for treatment.

WARTS.—This consists of a collection of enlarged cutaneous papillæ, and is so common as to be readily distinguished by everybody. To effect a cure apply Kendall's Spavin Cure thoroughly for several weeks. In most cases it is a good way to saturate a small piece of cotton batting and bind it onto the wart, and wet the batting with the Cure as often as it becomes dry. For warts on cow's teats, this remedy has been the most successful of anything we ever knew of being used, by applying the Spavin Cure thoroughly after each milking; and this treatment is also the best thing known for cracked or sore teats.

WEAK BACK AND SPINE.—This is manifest by pain in the back, and is a symptom of some spinal disorder, or of some affection of the kidneys, and is best treated in the great majority of cases by bathing the back over the location of the pain for two or three times a day freely with Kendall's Spavin Cure, either the refined for human flesh, or the unrefined, as will best suit your convenience. The above treatment has given remarkable results, as it has cured some cases of long standing which were reported to be given up by all physicians as incurable.

Stitch in the back is also treated very successfully with Kendall's Spavin Cure applied and rubbed in well as recommended above. We never knew it to fail in a case of this sort.

WOUNDS.—Nearly all wounds, excepting those which are so extensive as to require the careful attention of a surgeon, are treated very successfully by applying Kendall's Spavin Cure directly into the wound. It has been used with the very best of success in all wounds for which we ever saw it used. The wound should first be cleansed with water, and, if necessary, use castile soap to remove any filth or dirt, and then apply the Cure. It will cause considerable smarting for a short time, but this will soon subside. Only a small quantity is necessary.

HYGIENE.

In the short space allotted for this important subject, we shall endeavor to condense a few thoughts, and give the most important facts relating to *the laws of health, or the best method of preventing disease.* This is one of the most important subjects that could possibly be presented in this space, which would be in keeping with the main object for which we publish this book, and that is to improve and better the condition of the unprofessional class, by teaching them how to preserve their health, as well as to restore it, after disease is fastened upon them.

Improved Slop-hole.

Place for throwing slops. 2. A ventilator, which should be continued up to carry the gas to the top of the house, or where it can do no harm. 3. A gate, which can be raised to let the water run out at the bottom in winter, or to clean out whenever it is necessary. 4. Outlet. 5. An outlet, which can be used in cold weather. 6. A partition to prevent gas from escaping where it may do injury.

Pure air is strictly essential to maintain perfect health; and to secure this object, it is quite important in the start that the buildings and surroundings should be properly located. When it is practical, the house and other buildings should be located on such an elevation as to secure a thorough natural drainage.

This is the first important step to secure pure air; for without this, unless great pains are taken, there will soon be located around the buildings, pools, slop-holes, etc., which are filled and then dried up, and this repeated continually during the hot season, and thus the air is contaminated with a poison which makes it impossible to maintain perfect health, and in thousands of cases brings on disease which results in death; therefore we wish to *impress* upon the minds of our readers the great importance of *looking after the drain, cesspool,* etc., and to see that *refuse* matter is not thrown into the drain or any pool that may be near the premises, as it will *here decompose,* and add to the great danger from these places. It is also very important to ven-

GLYCEROIL FOR THE HAIR.

ence has proven that the many preparations placed before the ablic for toilet and other purposes, have been in very many instances, entirely useless or of positive injury.

ng of no hair dressing that seemed to fully meet the popular demand for an article both s and harmless, we have, regardless of time and expense, made a thorough study of the physiological and pathological conditions of the hair and scalp and of the diseases they , and at the same time by untiring labor and innumerable experiments we have formed ation known as

"GLYCEROIL."

as for sev rs stood t severe d proven be not on- ed or arti- oilet use, cleansing p and for dressing, for pro- a luxuri- th of hair eads that ome bald, r of how nding. As ressing it make the ff or dry, and plia- acts as a d stimu- the hair,

producing glands making it a Restorative of priceless value without those harmful qualities from which but few are free.

Experience has verified the correctness of the attributed virtue of "GLYCEROIL" and its remarkable tonic, stimulant and invigorative properties have given it a well merited world-wide reputation.

The formation of the hair is one of the earliest works of nature and probably of most enduring for their growth is continual, not only during life but for a short time th, and it may be preserved for centuries. However the non observance of hygienic d excess of mental and physical labor is sure to cause premature baldness and grayness air, consequently, when but the prime of life is reached, that which should be the g glory of man and the chief beauty of woman too often becomes the first evidence of lining years and diminished power. "GLYCEROIL" has never yet failed to arrest that e baldness which, regardless of disease, is so characteristic of the overworked fast eople of the present century.

ience of anatomy has shown the hair to be a nearly cylindrical appendage of the skin, s to the feathers of birds and the scales of reptiles, and to consist of a *root*, the part d in the skin; the *shaft*, the portion projecting from the surface.

oot being that portion from which the nutrition is almost wholly derived is the portion

harmless toilet article, until the discovery of "GLYCEROIL", that would for year
hair in a natural and healthy condition, and at the same time possess those p
would invigorate and stimulate to renewed action in case of disease no one will
"GLYCEROIL" is not the pet scheme of a business enterprise.
"GLYCEROIL" is not a cheap preparation of oil and perfume.
"GLYCEROIL" is not a dye, although by imparting health and vigor the hair re
ral color. But "GLYCEROIL" is the *tried* and *true*

PRESERVATIVE UNPRECEDENTED, THE RESTORAT UNRIVALLED,

That will meet all and every above mentioned requirement as a dressing for the h
The nutrition of the hair being effected through vessels in close contact with it
readily seen that causes affecting the general health and especially the condition
act powerfully upon the nutrition of the hair.

ALOPECIA OR BALDNESS.

Baldness or loss of hair presents an extensive range of variations in degree fr
thinness to complete baldness, and the causes from which it arises are many
prominent being Exhausted nutritive power of the skin, Nervous shocks, De
nerves supplying the scalp, Headaches, Fevers and from certain skin diseases.

SYMPTOMS.

It is a well established fact in the science of medicine that different diseases p
symptoms in common and the diseases of the hair are no exception to this time
Dandruff and Dryness of the hair are usually the symptoms of coming baldness, no
the disease or how caused, and if not at once arrested, partial or complete baldne
follow.
The use of "GLYCEROIL" at the commencement of the formation of Dandruff
hair and scalp becoming dry and effectually eradicate all disorder.
The use of "GLYCEROIL" after the hair has become rigid, brittle and commence
render it smooth, soft and elastic and immediately check the loss.
The use of "GLYCEROIL" after the head has become wholly or partially bald
the growth of a new and healthy head of hair with the rich, luxuriant and glossy
that can only be obtained by the use of this combination of nature's own restorati
known as "GLYCEROIL."

DIRECTIONS FOR USING "GLYCEROIL."

As a hair dressing, apply the same as an ordinary hair oil; to promote the gr
hair, apply once a day and rub down to the scalp well.

ilate the house and apartments thoroughly, as effluvia and organic vapors of various kinds become developed in every house which is occupied, and may be harmless when fresh; but they are subject to early decomposition, and then they become very hurtful, although the occupant of the house is, perhaps, unaware of its presence. To prevent this, every house should be swept throughout every day by a current of fresh air, which should be allowed to pass through each room, to cleanse its atmosphere and remove every impurity. The best way to accomplish this object, is to open windows on opposite sides of the rooms every morning early, and allow them to remain open for a sufficient time.

The cellar should be thoroughly drained and ventilated, *by all means*, if you expect to be healthy; for *no person* can have perfect health and live in a house which has a wet, damp, and poorly-ventilated cellar; and we *entreat you* to attend to this matter *at once*, and remove every decaying vegetable, pieces of old boards, or any other substance which remains rotting there. We know thousands are neglecting this matter; but this is no excuse for others, for we also know that thousands are dying every year on account of this neglect, and their friends wonder why it is they are taken from them; and we give you the answer by saying, *because* they neglected to observe the "laws of Nature." It is a settled fact that every violation of these laws will be punished accordingly. Always remove all the cellar windows early in the Spring, and do not replace them until late in the Fall; and in this way your building will last much longer, to say nothing of the vastly more important item of ventilating, to save your health and the lives of your family.

If you are to build a new house, be sure to take pains about ventilating and draining the cellar, for it *positively* is the most profitable way you can spend the amount it will cost you; for it will cost but a very little if attended to while you are constructing your house; and then you will always have a dry cellar, with pure air in it as long as the ventilation is proper, which will ensure you good health (providing no other law is violated to cause sickness); and all know that only an ordinary run of typhoid fever, even if the patient lives through it, is more expensive than to attend to the whole of the matters enumerated above; and if life is saved, as it often is, by observing these matters, it is more than all else combined. To ventilate the cellar properly, the chimney should start from the ground, and should be built larger than is customary in many places. It should be inside the flue, at least, twelve by twenty inches, or larger; then have a small register at the bottom of the cellar, and just under the floor, and in each room it may pass through just above the floor, which will allow the carbonic acid gas, which always settles to the bottom of any room where it is confined, to pass off up the chimney and be replaced by pure air. An excellent and cheap way to ventilate, is to build a thin board box to occupy all the space between the studding, which will extend continuously from the sill of the house to a ventilator, which shall be placed above the roof, and place a register opening into it, just above each floor, which should always be kept open night and day; then place a register just under the ceiling, which shall open into the box, which may be closed wholly or partly when the room is too cool, if the air is pure, but should be opened whenever it shall be necessary to cool the temperature or to purify the air; but remember that it is very important to keep the lower register open continually to get rid of the poisonous gas which settles in the bottom of the room. The old-fashioned fire-places are the best ventilators that can be built. If the board box is adopted for a ventilator, it should extend to the bottom of the cellar to ventilate it properly.

The temperature of the body should be evenly and properly maintained to secure perfect health; and to accomplish this purpose requires great care and caution at times. The human body is, so to speak, the most delicate and intricate piece of machinery that could possibly be conceived of, and to keep this in perfect order requires constant care. It is a fixed law of Nature that every violation thereof shall be punished; and so we find that he who neglects to care for his body by protecting it from sudden changes of weather, or draughts of cold air upon unprotected parts of the body, suffers the penalty by sickness, which may vary according to the exposure and the habits of the person, which affect the result materially; for what would be an easy day's work for a man who is accustomed to hard labor, would be sufficient to excite the circulation to such an extent in a person unaccustomed to work, that only slight exposure might cause the death of the latter when over-heated in this way; while the same exercise and exposure to the man accustomed to hard labor might not affect him. So, we say, be careful of your bodies, for it is a duty you owe to yourselves, your friends, and particularly to Him who created you. When your body is over-heated and you are perspiring, be very careful about sitting down to "cool off" as the custom of some is, by removing a part of the clothing and sitting in a cool place, and perhaps where there is a draught of air passing over your body. The proper way to "cool off" when over-heated is to put on more clothing, especially if you are in a cool place; but never remove a part of the clothing you have already on. If possible, get near a fire where there is no wind blowing, and *dry off* gradually, instead of cooling off suddenly, which is always dangerous.

Abuses of the body are in numerous ways. Excesses of various kinds are abuses of the body, which shorten our lives. Our space will not admit of a full consideration of the many excesses to which many persons are addicted; but let the warning be sufficient when we say, that all excesses are draughts upon our old age, payable with compound interest. We are constantly reminded, as we look out upon the vast ocean of human beings, of the awful abuses to which many subject themselves. We see men who, from the hard work they perform and the improper and insufficient food they eat, are poor in flesh and look haggard on account of the abuses to which they subject themselves; and in many of these cases the persons who are these victims are "well-to-do" persons, who are straining every nerve to get gold. To such, let me

say—stop, and consider the errors of such a course; life and the responsibilities of life, are not trifling mattters, as you in your carelessness treat them. You were placed on this earth by the Creator to be happy, and if you are not, it is your own fault, unless you are the victim of some-one's transgression or misdealing. It may be useless to endeavor to reform those whose lives are well spent, and whose habits are so firmly fixed, as to make it impossible to change them; but for the young we feel a deep interest that we may lend a helping hand, and by giving you good advice, help you to preserve your health, lengthen your days on the earth, and thus promote your happiness. To all such we would say, God never designed you to be unhappy, and He never designed that you should labor so hard and have such a scanty living as to make you poor, unhealthy men and women, and in this way shorten your days on the earth and make the few years you live here miserable, and finally leave a poor, weakly posterity. Do not let us be misunderstood, for we would not have anyone believe that we would recommend slothfulness in business or abstinence from labor, nor would we recommend an unnecessary and over-abundance of rich food; for all these would be abuses as far in the opposite direction; but if you would be healthy and happy in this life, follow the advice given by St. Paul to the Thessalonians, when he told them to work with quietness that they might eat their own bread. This advice will apply to both classes; the man who works too hard, as well as the sluggard who prefers to eat another's bread. For this class we have but little sympathy, for there is but little hope of reform in their case; but we admire the man who is full of life and ambition, and it is this class that we hope to assist in this essay, by warning them before it is too late, that they may save their health, and in many cases life, by not over-taxing their bodily strength, and by living a generous but temperate life.

Many may think that the above advice is meant to apply only to those who labor with their hands, but there is a class of men who labor with their minds, who are in greater danger, if possible, than the former class, because when they do more mental labor in a day then they should, they do not always become aware of the fact, and so they continue on in the same way the second day, and so on, until finally they are unable to sleep, and they lie quietly a part or the whole of the night planning and studying, and they go on in this way over-taxing the mind until they "break down," perhaps never again to recover their former strength and ability. To such, let us say, do not for a single day expose yourself to this great danger; but when you have done a fair day's work, stop and forget, if possible, everything you have been thinking about during the day. You should have some innocent recreation, which you will enjoy so well as to get your thoughts completely off from the business of the day, and which you can enjoy from the time your day's work is done until you retire for the night, or so long as you may think proper or best. Remember that it is not he who makes the longest days who produces the finest and most valuable thoughts, or accomplishes the most in life. This advice is intended for the ambitious, for we have no idea there will be many lazy persons who will ever read this; but if we knew that any such person would, our advice to such a one would be to *work by all means*. We have no fears that you will ever injure yourself in this way. We wish to impress this fact upon the minds of our readers, that by constantly repeating, day after day, or even at longer intervals, any of the causes of disease, however slight it may be, it will at last certainly undermine the health and produce disease which may cause death.

Water from wells situated like the one represented in this engraving should never be used for drinking purposes.

The water we drink is little thought of by many, whether it be pure or not, and yet this is one of the most important matters which relates to the welfare of our families. We have not the space to discuss this subject fully, but we propose to notice some of the impurities in the water we drink, which will be found in thousands of places, and which, if used a sufficient length of time, will be sure to cause disease, and in many cases death. The accompanying engravings show the actual condition of thousands of wells which may be found in this country, and which any person can readily see will catch the filthy and decomposing matter from the slop-holes, privy, etc., which soaks through the soil and finds its way into the wells. Water from such a well as this is as unfit to put into any living being's stomach as would be paris green or any other

CHAFING.—Take white vitriol one scruple, water one pint. Mix, and bathe the parts with the mixture, and when dry apply a little fresh butter which has no salt in it. The oxide of zinc ointment is also *excellent* in many cases.

CHOLERA.—Take pure Jamaica ginger one-half ounce, gum guaiac one-fourth ounce, cinnamon one-fourth ounce, cloves one-fourth ounce; powder or grind each fine, and put into one pint of the best brandy. Shake well, often, and if it can remain two weeks or more after it has been mixed, then allow it to settle, and pour off from the drugs all that will run clear; but if it must be used as soon as mixed, shake well before pouring out. *Dose*, from one to four teaspoonfuls, and repeat every half hour until arrested.

The above is an excellent remedy for summer complaints.

CLERGYMAN'S SORE THROAT.—Tonic remedies, such as quinine and iron, if the patient is pale, with proper hygienic management, are of great importance. In bad cases, apply with a swab the following solution: nitrate of silver twenty grains, water one ounce. Mix. To relieve the throat when speaking use the cough lozenges.

COUGH LOZENGES.—Take extract of liquorice one ounce, opium one scruple, gum arabic one ounce, white sugar one ounce, elecampane one-half ounce, oil anise fifteen drops, syrup of tolu sufficient to work into mass. Mix. Divide into lozenges weighing six grains each. Dose, one to five, and repeated as often as necessary to afford relief.

COUGH SYRUP No. 1.—Syrup of squills four ounces, syrup of tolu four ounces, tincture of blood-root one and one-half ounces, camphorated tincture of opium four ounces. Mix. Dose for an adult, one teaspoonful repeated every two to four hours, or as often as necessary.

COUGH SYRUP No. 2.—Powdered extract of liquorice four ounces, muriate of ammonia one ounce, tincture of opium one ounce, tincture of lobelia two ounces, tincture of seneka root two ounces, syrup of squills two ounces. Mix. Dose for an adult, one teaspoonful. Shake well before pouring out.

COUGH MIXTURE.—Tincture of tolu, tincture of capsicum, tincture of blood-root, oil anise, of each one-half ounce. Mix. Shake well, and take twenty drops every hour or two.

COUGH MIXTURE.—Hive syrup, syrup of tolu, of each two ounces, camphorated tincture of opium one ounce, wine of ipecac one-half ounce. Mix. Dose for an adult, one teaspoonful. Salt taken in quantities of about one-fourth teaspoonful, and repeated as occasion requires, is good for chronic coughs.

COUGHS, COLDS, OR BRONCHITIS.—Take of sale molasses one-half cupful, Jamaica ginger one heaping teaspoonful, soda or saleratus one-fourth teaspoonful. Mix, and beat thoroughly. Dose, one teaspoonful, repeated every hour until relief is afforded. Apply a mustard paste over the lungs or throat.

CROUP.—Take tincture of blood-root two ounces, wine of ipecac two ounces, hive syrup four ounces. Mix. Dose, for a child one year old, five to ten drops; two years, eight to twelve drops; three years, twelve to fifteen drops; four years old, fifteen to twenty drops; five years old, twenty to twenty-five drops, and older children in proportion to age. Repeat as often as shall be necessary to procure relief. If it is thought best to produce vomiting, repeat the dose every ten or fifteen minutes for a few doses.

DANDRUFF.—Take glycerine four ounces, tincture of cantharides five ounces, bay rum four ounces, water two ounces. Mix, and apply once a day, and rub well down to the scalp.

DIABETES.—Take carbonate of ammonia one hundred grains, water one pint. Mix, and dissolve, and take during the twenty-four hours in divided doses.

DEFICIENCY OF BLOOD.—Take citrate of iron two drachms, iodide of potassium two drachms, water two ounces; mix, and dissolve the iron and potassium; then add four ounces of compound tincture of cinchona. Dose for an adult, one to four teaspoonfuls half an hour before each meal, and children in proportion. If the bowels are constipated, or the liver inactive, give the Persian pills, described on page 96, in sufficient doses to regulate the system.

DIARRHŒA No. 1.—Take tincture of Jamaica ginger one ounce, tincture of rhubarb one ounce, tincture of opium half ounce, tincture of cardamom one and one-half ounces, tincture of kino one ounce. Mix. Dose for an adult, half to one teaspoonful, repeated every two to four hours; and for children one year old, five drops; two years old, five to ten drops; three years old, ten to twelve drops, and older children in proportion to age.

DIARRHŒA No. 2.—Take tincture rhubarb one ounce, tincture capsicum one-half ounce, tincture of opium one-half ounce, tincture of camphor one-half ounce, essence of peppermint one ounce, tincture cinnamon one ounce, tincture of cardamom one ounce. Mix. Dose, one-half to one teaspoonful for an adult, and smaller doses for children.

DIARRHŒA No. 3.—Take blackberry root ground one pound, cinnamon two ounces, cardamoms two ounces, cloves one ounce, allspice one ounce, Jamaica ginger one ounce; grind all and put into six quarts of water, and boil slowly down to one quart, stirring often; press the drugs and strain, and add four ounces loaf sugar and one pint of best brandy. Dose, one to three teaspoonfuls for an adult, and smaller doses for children.

DIARRHŒA No. 4. — Take one ounce each of the following tinctures: tincture of kino, cardamom, opium, rhubarb, Jamaica ginger, and camphor. Mix, and give for an adult from fifteen to thirty drops before meals, or oftener in bad cases. Shake well before pouring out.

DIPHTHERIA. — For treatment of this terrible disease, see DIPHTHERIA in the fore part of this book, and also the following receipts, which are said to be excellent: —

No. 1. — Take of sulphuric acid four drops, water three-fourths tumblerful. Mix, and stir well, and give at one dose to an adult; children in proportion to age. Repeat as occasion requires. It is said to coagulate the diphtheritic membrane, and cause its ready removal by coughing; and is considered by some almost as a specific.

No. 2. — Take one teaspoonful of sulphur and two ounces of water, and stir with the finger, instead of a spoon, until it is well mixed; then use it as a gargle; also have the patient take a teaspoonful of the sulphur in two ounces of water, and repeat the dose four or five times during the day; and repeat the gargle every hour until improvement takes place. If the patient is so badly off that they cannot use the gargle, put a teaspoonful of the sulphur on a live coal, and let the patient stand over it and inhale the smoke made by its burning; or, in some bad cases, where the throat is nearly closed, it might be well to blow a little of the sulphur through a quill into the throat. It is said that Dr. Field of England has treated many cases in this way, and all recovered.

DROPSY. — Take of sweet spirits of nitre four drachms, elaterium one grain, syrup of ginger three drachms. Mix. Dose, one teaspoonful in a wineglassful of water every two hours, until the bowels are moved freely. After the bowels have been moved freely, get the following prescription filled, and take until a cathartic is again needed, when the above should be taken again as before:

No. 2. — Milkweed root one ounce, dwarf elder root one ounce, juniper berries one and one-half ounces, mustard one-half ounce, horse radish root three-fourths ounce, mandrake one-fourth ounce, yellowdock root one and one-half ounces, iodide of potassium one drachm. Grind all together, or bruise well in an iron mortar, and add eight pints of hard cider. Dose, a wineglassful half an hour before each meal.

EAR-ACHE. — Take equal parts of tincture of opium and glycerine. Mix, and from a warm teaspoon drop two or three drops into the ear, and stop the ear tight with cotton, and repeat every hour or two. If matter should form in the ear, make a suds with castile soap and warm water about 100° F., or a little more than milk warm, and have some person inject it into the ear while you hold that side of the head the lowest. If it does not heal in due time, inject a little carbolic acid and water in the proportion of one drachm of the acid to one pint of warm water each time after using the suds.

EYE-WATER No. 1. — Take white vitriol three grains, pure nitrate of potash three grains, pure soft water two ounces. Mix, and drop one drop into the eye, and bathe the outside of the lid; after a few minutes close the eye, and bath the eye with cold water. Repeat three or four times a day.

EYE-WATER No. 2. — Sea salt one heaping teaspoonful, water one-half pint. Mix, and allow it to stand over night, and then pour off, leaving the settlings in the bottom. Bathe the outside of the eyelids three or four times a day, working a drop into each eye each time. Be sure to get the sea salt which can now be bought of druggists.

FAINTING. — Take compound spirits of lavender one ounce, aromatic spirits of ammonia one-half ounce. Mix, and give a small teaspoonful in a little milk or water. Persons who are subject to fainting should carry a "smelling bottle," which is simply carbonate of ammonia in a bottle. In the majority of cases fresh air and a little cold water in the face is all that is necessary. It is best for those subject to fainting to avoid all crowded assemblies and places where the air is impure or close.

FARCY IN MAN. — Take either the sulphite of soda or the sulphite of magnesia in doses of forty grains, and repeat the dose four or five times every twenty-four hours. Remember not to get the sulphate but get the sulphite. Iodide of potassium and quinine are useful in most cases, given as soon as the sulphite is discontinued, or sooner, if thought best. For dose, see table of doses.

FELON. — See WHITLOW.

GLANDERS IN MAN. — See FARCY IN MAN.

GOUT. — Take of bicarbonate of potash one ounce, wine of colchicum root one-half ounce, water eight ounces. Mix, and give one tablespoonful two or three times a day. Bathe the affected part well with Kendall's Spavin Cure. Regulate the bowels with the Persian pills described on page 96.

GRAVEL. — Take of bicarbonate of potash two ounces, water one pint. Mix. Dose, two tablespoonfuls twice a day; also give water freely during the day.

GREEN SICKNESS. — This is an affection of young women, and usually occurs between the ages of twelve to eighteen years. In this disease there is a peculiar wax-like hue of the countenance. Treat as follows: take of citrate of iron one-half ounce, water eight ounces, Bourborn whiskey eight ounces. Mix, and give one teaspoonful three times a day. If the appetite is poor, give one grain of quinine half an hour before each meal, and give a good nourishing diet. If the bowels are constipated, give the Persian pills descibed on page 96, to regulate and promote a healthy action of the bowels and the internal organs.

I have found sulphite of potassium (Sulphite Salt) [illegible] for removing stains or opacity of the cornea

HAIR RESTORATIVE.—Take of lac sulphur two drachms, borax one drachm, sugar of lead one drachm, alcohol one-half ounce, aqua ammonia one drachm. Mix the above and allow to stand one day, and then add common salt or sea salt one-half teaspoonful, bay rum two ounces, essence of bergamot one-fourth ounce, soft water six ounces. To color the hair, apply once a day. For falling of the hair, apply twice a day, or, what is better, use the receipt recommended for DANDRUFF.

HAY-ASTHMA (Hay-fever or Summer Catarrh).—Take of ethereal tincture of lobelia three drachms, wine of ipecac two and one-half drachms, ammoniac mixture five ounces. Mix. Dose one or two tablespoonfuls repeated every six or eight hours. Tobacco is a valuable agent in relieving the paroxysms by smoking. Change of climate is often very beneficial. Regulate the bowels with the Persian pills (see page 96).

HEADACHE.—Remove the cause if it be either decayed teeth, dyspepsia, or indigestion, congestion of the head, the use of strong tea or coffee, constipation, oversleep, want of exercise in the open air, etc. The Persian pills are the best remedy known to regulate the bowels and to remove constipation, which is a fruitful cause of headache (see page 96).

HEARTBURN.—Take of magnesia one, two, or three teaspoonfuls in a tumbler of water. Avoid the use of sugar, or anything which turns sour in the stomach; also avoid the use of tobacco, especially if it gives rise to any unpleasant symptoms. Remove the cause if you can do so.

HERPES (Tetter, Shingles).—Persian pills (see page 96) taken at bed-time, two to four, or sufficient to move the bowels, which may be repeated as often as is necessary. Also give the following: iodide of potassium one-half ounce, fluid extract of sarsaparilla five ounces. Mix. Dose, one-half to one teaspoonful, before or after meals, as preferred by the patient. Locally, apply oxide of zinc ointment, or, what some claim is better, is to wet the surface, and then rub it with ashes made by burning tobacco.

HICCUP (Hiccough).—Take of tincture of musk one-fourth ounce, tincture of hyoscyamus one-fourth ounce, sulphuric ether one drachm, essence of anise one-fourth ounce. Mix. Dose, from fifteen to thirty drops repeated every half hour. In some cases drinking several swallows of cold water without breathing will stop it; also a lump of sugar taken into the mouth and dissolved slowly and swallowed will stop many cases.

HIP DISEASE.—This, or any similar disease, can be treated better and more successfully with Kendall's Spavin Cure than any other remedy known to us. If there exists any inflammation in the part to be treated, give laxatives, and then the alterative, containing iodide of potassium, and as soon as the inflammation is partially or wholly reduced, apply the Spavin Cure thoroughly two or three times a day for several weeks.

HIVES (A rash).—Take of Epsom salts two ounces, pure cream of tartar two ounces, sulphur one ounce. Mix. Dose, one or two teaspoonfuls two or three times each day for several days; or sufficient to move the bowels freely once each day. Apply to the surface flour freely, to relieve the rash; or, if this does not relieve it, try glycerine two ounces, water four ounces, sugar of lead one-half drachm. Mix.

HOW TO GET RID OF BED-BUGS.—Take of corrosive sublimate one ounce, alcohol one pint. Mix, and when dissolved, apply around the cracks and holes of the bedstead. This is a deadly poison, and should not be left about the house, unless you are particular to label plainly and keep out of the reach of children. It never fails to remove all the bugs when thoroughly used.

HOW TO GET RID OF RATS.—Take of cayenne pepper a sufficient quantity, and sprinkle it freely around the places which are visited often by the rats.

ITCH.

IMPURE BLOOD.—Take of iodide of potassium one-half ounce, fluid extract of sarsaparilla three ounces, fluid extract of yellow dock three ounces, fluid extract of dandelion two ounces. Mix. Dose, one teaspoonful half an hour before or after each meal, as preferred by the patient. If the patient is pale and weak, add to the above one-fourth ounce of citrate of iron. Regulate the bowels with the Persian pills. (See page 96.)

ITCH.—Take of sulphuric acid one ounce, water one quart; mix gradually, and add sulphate of potash three ounces. Wash the parts well with castile soap and water, and then wipe dry and apply the mixture twice daily. Sulphur ointment will cure it, but is more objectionable to most people. If it is decided to use sulphur, an ointment can be made by mixing

THE INSECT CAUSING ITCH LARGELY MAGNIFIED.

if applied in the form of powdered crystals [illegible] the eyeball twice daily. [illegible] de Pharm. [illegible]

sulphur three ounces, and lard eight ounces. Before applying this ointment, the parts should be washed well, as recommended above. It is also a good plan to mix equal parts of sulphur, pure cream of tartar, and epsom salts, and take from one-fourth to one teaspoonful two or three times a day, or sufficient to loosen the bowels a little.

NIGHT SWEATS. — Take of sulphate of quinine one drachm, aromatic sulphuric acid one-fourth ounce, water eight ounces. Mix. Dose for an adult, from one-half to one tablespoonful in a little water, taken half an hour before each meal and at bed-time. In absence of the above acid, put in two ounces of hard cider and six ounces of water. The cider covers the bitter taste as much as can be done by any remedy.

NURSING SORE MOUTH. — Use the gargle containing chlorate of potash. (See GARGLE.) Take internally the following: iodide of potassium one-half ounce, fluid extract of sarsaparilla four ounces, fluid extract dandelion two ounces. Mix. Dose, one teaspoonful two or three times a day.

PILES. — Take of the inner bark of the white oak one pound, water two gallons; mix, and boil for three or four hours; strain and boil again until it becomes a thick extract, then mix this with an equal quantity of tar, and simmer together until a union takes place when cold. Apply with the finger each night until well. Keep the bowels open with mild laxatives if necessary, such as the Persian pills described on page 96.

PROUD FLESH. — Apply, a few times, either of the following articles: burnt alum, nitrate of silver, or blue vitriol. Then treat as you would any healthy sore.

PRURIGO. — First wash the part well with castile soap and water and wipe dry; then sponge the surface well with strong vinegar, and allow it to dry without wiping; and after the surface is dry, apply citrine ointment, and repeat the application morning and evening for six or eight days.

RATS. — See HOW TO GET RID OF RATS.

RINGWORM. — Apply lunar caustic freely after the surface has been moistened; and repeat after a few days, if the first application does not effect a cure. Some recommend highly the use of the strong acetic acid, and wash the part directly after its use with cold water.

RINGWORM.

SCALD-HEAD. — Take of creosote one-half ounce, calomel and sulphur ointment, of each one ounce. Mix, and apply after the surface has been thoroughly cleansed with castile soap and warm water; then wipe dry, remove any loose scabs, and apply the ointment recommended above.

APPEARANCE OF SCALD-HEAD.

SEA-BATHS. — Sea salt six ounces (one teacupful), water one gallon. Dissolve the salt in the water and you have the real sea bath at home. Be sure to get the sea salt (not the common salt); it can be had of druggists. The temperature for the *warm bath* should be from 90° to 98°; for the *tepid bath* from 85° to 90°; and for the *cold bath* from 33° to 65°.

SICK-HEADACHE No. 1. — Take of bromide of potassium one ounce, chloral one-half ounce, water seven ounces. Mix. Dose one teaspoonful, and repeated in one, two, or three hours, according to the severity of the case. If constipated, see TREATMENT OF CONSTIPATION.

SICK-HEADACHE No. 2. — Take of honey two or three tablespoonfuls on an empty stomach, and then lie down and keep quiet until the honey has moved out of the stomach.

SHINGLES. — See HERPES.

SNAKE-BITE. — Draw a cord tightly around the limb above the bite, between the place bitten and the body, to prevent the poison entering the circulation through the veins; then cut out the place bitten with a sharp knife, and allow it to bleed a little before removing the cord. Give the patient internally, all the whiskey he can drink; or, if no signs of intoxication are produced by it, give from a quart to a gallon in six or eight hours, and gradually decrease the quantity when its effects are perceptible; but do not stop its use too soon. Give also two to four ounces of olive oil every two or three hours, until it moves the bowels freely.

SLEEPLESSNESS. — The receipt given above for sick-headache No. 1 works admirably in most cases.

SORES AND ULCERS No. 1. — Take of iodoform one drachm, balsam of Peru six drachms, cosmoline one and one-half ounces. Mix. A good application for foul or indolent sores and ulcers.

No. 2. — Take of carbolic acid one drachm, simple ointment eight ounces. Mix them thoroughly.

No. 3. — Cleanse the sore or ulcer thoroughly with castile soap and warm water and wipe dry; then apply a little of Kendall's Spavin Cure, and repeat this two or three times a day. Take the alterative No. 1 to purify the blood, and if the bowels are constipated take the Persian pills noticed on page 96.

SOUR STOMACH. — See HEARTBURN.

ST. VITUS'S DANCE. — Take of the ammoniated tincture of valerian a sufficient quantity. Dose, one-half to one teaspoonful repeated three or four times a day. Among the other remedies which afford temporary relief, are black cohosh, cannabis, Indica, Fowler's solution, opium, conium, assafœtida, camphor, etc. Music often relieves the patient. In addition to some one or more of the above remedies, a tonic course of remedies should be taken, and strict attention given to observing the laws of health. The diet should be nutricious, with plenty of milk, eggs, and fresh meats. Give ten to twenty grains of carbonate of iron two or three times a day for several days.

TAPE-WORM. — Take two ounces of common pumpkin seed and remove the outer envelope; then place in a mortar and beat into a paste with sugar, and add nearly half a pint of water, and take at one dose. This may be repeated for several days if necessary. The patient should take no nourishment excepting beef-tea for one or two days before taking the pumpkin seed; and in four hours after the dose has been taken, castor oil should be given sufficient to move the bowels.

TETTER. — See HERPES.

TOOTHACHE. — Take two or three drops of oil of cloves on cotton, and insert in the cavity of the affected tooth. Also, one or two drops of creosote, used as recommended above, is very good. An excellent remedy is found in Kendall's Spavin Cure, by applying as recommended for oil cloves, and also around the gums a little.

TOOTHACHE DROPS. — Take of acetic ether two drachms, chloroform one drachm, creosote one drachm. Mix.

TOOTH POWDER. — Take of powdered charcoal and orris root equal quantities. Mix. If preferred in a paste, add a little glycerine or honey and mix all well together.

ULCERS. — See SORES AND ULCERS.

ULCERS OF THE MOUTH. — Take of permanganate of potassium fifteen grains, water one pint; mix.

WHISKER DYE. — Take of soft water two ounces, aqua ammonia (4 F.) nine drachms, alcohol (95 per cent.) one ounce, tincture of iodine ten drops, nitrate of silver sixty-five grains, pulverized gum arabic fifteen grains. Mix. Apply with a small brush and comb, and then go out into the air and sunshine and it will turn black. If the skin is stained it can be removed with a solution of cyanide of potash.

WHITLOW OR FELON. — The best treatment known to us is to apply Kendall's Spavin Cure thoroughly, by saturating a small piece of cotton and binding it on to the finger. Keep the cotton moist with the Cure for several hours or days if necessary.

WORM LOZENGES. — Take of santonin one drachm, sugar four ounces, tragacanth one drachm; powder all, and mix thoroughly in a mortar. Then add sufficient peppermint water to form into a mass, and make into one hundred and twenty lozenges. Dose for a child two years old, one lozenge; five or six years old, two lozenges; ten to twelve years old, three lozenges. Adults, five or six lozenges. The patient should fast for twelve to fifteen hours previous to taking the lozenges, and then take a dose, and follow it in four to six hours with a full dose of castor oil to move the bowels freely. If necessary, repeat the dose for several days.

FAVORITE PRESCRIPTIONS.

ALTERATIVE No. 1.—Take of iodide of potassium one ounce, fluid extra sarsaparilla eight ounces, compound tincture of cinchona five ounces, compound tinctu cardamom three ounces. Mix. Dose for an adult, one or two teaspoonfuls three times a An excellent prescription for scrofula or any impurity of the blood, such as syphilis, in ulcers, boils, swellings of the glands, chronic rheum some cases of eczema, salt-rheum, chronic gout, some of asthma, gonorrhœal rheumatism, and in cases of and mercurial poisoning. If constipation exists, see ment for CONSTIPATION, and follow directions given th all cases.

SALT-RHEUM OR ECZEMA.

No. 2.—Take of syrup of iodide of iron one fluid extract of sarsaparilla one ounce. Mix. Dose adult, one teaspoonful three times a day in two tablespo of water. Useful in derangement of the heart's actio pitation, early stages of consumption, chronic rheum with debility, scrofulous affections of the glands, with d and pallor, old-standing venereal diseases, etc.

No. 3.—Take of mercury with chalk two rhubarb two grains, bicarbonate of soda two grains and make a powder, to be repeated as the occasion re An alterative which works well in many cases whe tongue is dry and foul, secretions acid, stools light diarrhœa with unhealthy secretions, mild dysentery, this should be taken for quite a number of days it wo well to follow it with Alterative No. 1.

No. 4.—Take of paregoric one-half ounce, sy ipecac one-half ounce, muriate of ammonia three dr sweet spirits of nitre five drachms, syrup of tolu two ounces. Mix. Dose, one to two tea fuls three or four times a day. An excellent remedy in catarrhal affections, such as bro laryngitis, hoarseness, irritation of the throat, and other affections of the mucous surfaces

CATHARTICS No. 1.—Take of castor oil two ounces, mucilage of gum ara ounce, syrup one ounce, peppermint water two drachms, cinnamon water three ounces. oil and mucilage by rubbing in a mortar, then add the other ingredients gradually. Dos one to three tablespoonfuls. An agreeable way to administer castor oil, which is a mild tain cathartic, and is particularly suited to those cases where free evacuation of the b desired without the irritating effect which is produced by many other cathartics. It is e for children. If the above mixture cannot be had easily, the taste of the castor oil can be destroyed by mixing the dose to be taken with a teacupful of beef-tea, well salted and pe and thoroughly stirred just before taking.

No. 2.—Take of pulverized rhubarb twenty-five grains, bicarbonate of soda twenty Mix, and take at one dose. A mild aperient in cases where the intestinal secretions are ished in quantity or otherwise deranged. Good for rheumatic or gouty subjects.

No. 3.—The Persian pills described on page 96 are the best cathartic known for the variety of cases. We have no hesitancy in recommending them above all others.

DISINFECTANTS No. 1.—Take sulphate of iron (copperas) and scatter it in t hole or any place of this kind where you desire to stop the unpleasant odor arising from position. It is one of the best disinfectants for this purpose considering its price.

No. 2.—Take of chloride of lime a small quantity. A teaspoonful at a time and rep often as necessary will be sufficient to disinfect an ordinary-sized room. It can be place open dish or mixed with a little water. This is excellent for sick rooms, privies, etc. A for the same purpose, carbolic acid one ounce, water forty ounces; mix, and use a small q when necessary.

DIURETICS No. 1.—Take of pure cream of tartar three-fourths ounce, fluid ex dandelion one-fourth ounce, infusion of buchu one pint. Mix. Dose, three tablespoonful three times a day, and stir thoroughly before pouring out each time. This is an excellent and cathartic in cases of dropsy, chronic rheumatism, and for irritable conditions of the or bladder.

No. 2.—Take of spirits of juniper one-half ounce, sweet spirits of nitre three- ounce, nitrate of potash one drachm, fluid extract of pipsissewa one-half ounce. Mix, one-half to one teaspoonful. A tonic and stimulating diuretic which is excellent for catarrhal inflammation of the bladder, scrofula, and some skin diseases, as well as disorders.

EMETIC.—Take of powdered ipecac ten to thirty grains for a dose. This is one best and safest emetics which can be given whenever it is thought best to produce vo After it has been taken for a few minutes, let the patient drink freely of warm water.

GARGLES. No. 1.—Take of chlorate of potash one ounce, muriated tincture of iron one ounce, water seven ounces. Mix, and gargle every hour or two in the throat, and if none is swallowed while using as a gargle, it is best to take one or two teaspoonfuls two or three times a day; or more may be used in diphtheria or bad cases of canker sore throat. The teeth should be well washed after using it each time, as it will make them dark and rough if this is neglected. This is one of the best gargles known for sore throat, inflamed tonsils, canker sore throat, or diphtheria, and should be kept constantly in the house for these difficulties. The potash will not all dissolve.

No. 2.—Take of sulphite of soda one drachm, water one ounce. Mix. Used similar to No. 1, or applied to the throat (especially in young children) with a camel's-hair pencil, or swab securely tied to a small stick, so as not to come off while in use.

No. 3.—Take of borax, pulverized, one drachm, glycerine one ounce. Mix. Useful in ulcerations of the tongue or throat, also in sore mouth of infants, and may be applied same as No. 2.

OINTMENTS. No. 1.—Take of liquid ointment of tar two ounces, spermaceti ointment one-half ounce, citrine ointment three-fourths ounce, oxide of zinc ointment one-half ounce. Mix. This is one of the best ointments known for eczema, psoriasis, lepra, and several skin diseases.

No. 2.—Take of sublimed sulphur one ounce, lard two ounces. Mix, and add two ounces of creosote ointment, and mix all well together. An excellent ointment for itch, and also for several chronic skin diseases.

PILLS. No. 1.—Take of the best powdered rhubarb forty-eight grains, socotrine aloes thirty-six grains, myrrh twenty-four grains, oil of peppermint five drops; mix thoroughly and beat into a mass by adding a few drops of water at a time until it can be rolled into pills; then divide into twenty-four pills. Dose, two to four pills at bed-time.

These are excellent pills for a mild laxative if made of pure drugs of the best quality. They are indicated where it is wished to simply move the bowels without reducing the strength of the patient. They are slow but efficient. The best pills known for most purposes are described on page 96.

SALVE.—Take of Burgundy pitch three ounces, bees-wax two ounces, mutton tallow two ounces, resin two pounds, oil of origanum one-half ounce, oil of hemlock one ounce, balsam fir one-half ounce, oil of wormwood one-fourth ounce, galbanum one-half pound. Melt all excepting the oils together; then add the oils and stir well, and pour into cold water and work with the hands until it is cool enough to form into rolls. If too soft, add more resin and bees-wax, or less if too hard to suit the fancy. This makes one of the best of *Strengthening Plasters* when spread on leather or cloth.

TONICS. No. 1.—Take of sulphate of quinine one drachm, diluted sulphuric acid ten drops, water four ounces. Mix. Dose, from one-half to four teaspoonfuls in a little water. This is one of the best bitter tonics known. For poor appetite, or to strengthen any person who is debilitated, take one-half to one teaspoonful half an hour before each meal, and continue it for several days, or weeks if necessary, and if the patient is pale as well as weak, add to the above one drachm of citrate of iron. For night-sweats take three or four teaspoonfuls just before going to bed.

For ague take four teaspoonfuls as directed in TREATMENT OF AGUE. This prescription will be found to be excellent for neuralgia, nervous irritability, weakness, painful chronic affections, with debility, exhaustion, with a weak and irritable stomach, impoverished blood, by adding the iron as recommended above, and for many other purposes where a tonic is indicated. If the bowels are inactive, treat as directed for CONSTIPATION.

No. 2.—Take of sulphate of quinine one drachm, diluted sulphuric acid ten drops, infusion of columbo five ounces, syrup of iodide of iron three ounces. Mix. Dose, one teaspoonful three times a day, either before or after meals as best suits the patient. Excellent for debility with a scrofulous or syphilitic taint, chronic rheumatism, goitre, etc.

REFINING OUR MEDICINE.

IT has been known to the publishers of this book for two or more years, that Kendall's Spavin Cure possessed most remarkable curative properties for many human ailments. We have learned this not only from our own personal experience, but from the thousands of letters received from our patrons who have claimed it has performed wonderful cures for them on their own persons. We have frequently been asked why we did not refine it expressly for human flesh, and have usually replied that there was no necessity for it; that it could be used as well for man as for beast, and this we believe to be the case; yet, to satisfy the great and popular demand for this, we have experimented for several months, and have succeeded in refining our Spavin Cure so as to give it a more acceptable color and odor. The drugs used for the refining process are very valuable in a preparation of this kind, giving this liniment not only the same drugs which

are in the unrefined Spavin Cure put up for horses, but also the addition of valuable drugs in the refining process, which, we believe, makes this the most valuable liniment ever put up for human flesh. On some accounts the *refined* may be more desirable as a household liniment, but we know of no reason why that put up for horses cannot be used on human flesh with perfect safety when so desired.

The refined for human flesh is put up in a red wrapper; price, 50 cents. That for horses and other animals is put up in light wrappers; price, $1.

NOTICE.

The immense sale and great popularity of Kendall's Spavin Cure has induced unscrupulous parties to imitate our style of advertising, etc., thinking to deceive the public by claiming to have a preparation similar to our goods. For this reason we hereby warn the public against one and all of these parties. The genuine Kendall's Spavin Cure, prepared for horses and other animals, is put up in a dark amber colored bottle, the name "Kendall's Spavin Cure" *blown in the glass* around the neck of the bottle, and "Enosburgh Falls, Vt.," blown in the bottom of the bottle. The Refined Spavin Cure, which has been refined expressly for Human Flesh, is put up in light colored bottles, and the words "Kendall's Spavin Cure, for Human Flesh," blown in the glass on the side of the bottle, and "Enosburgh Falls, Vt.," in the bottom. That put up for horses and other animals is in light colored pasteboard boxes; price, $1.00; and the Refined for Human Flesh in red colored pasteboard boxes; price, 50 cents. *Be particular* to notice that the words "D. B. J. Kendall Co., Enosburgh Falls, Vt.," are printed on every label and wrapper.

N.B. — The wonderful success which has been achieved by this remedy has encouraged the proprietors to refine it expressly for human flesh. No remedy has ever met with such unqualified success on all animals, which has led many hundreds to test its virtues on their own flesh. Thousands have found it to be sufficiently strong to penetrate and to have the real virtue to cure the worst cases of rheumatism, neuralgia, corns, bunions, warts, frost-bites, felons, chilblains, burns, or any pain, bruise, cut, or lameness, which are not effected in the least by ordinary liniments. It does not blister, but on the contrary removes soreness. That put up for horses can be used on human flesh, if desired, with perfect safety. We recommend all to keep it *well corked* and in the pasteboard box in which it is put up.

It has long been the opinion of eminent scientists, who have made the realm of nature the study of a lifetime, that the horse is our noblest domestic animal, perfect in structure, beautiful in appearance, and exhibiting a large amount of intelligence and affection many times, as shown in the above engraving. His physical nature closely resembles that of the human family, thus showing that the causes and effects of diseases may be quite similar to diseases in the human subject; therefore we would naturally infer that any remedy which is good for either man or beast would be equally as good for one as the other under similar circumstances.

this to be the case, and after hearing repeatedly from parties who had used "Ken-
Cure" with the most gratifying results, for lameness or deep-seated pains on their
we began to use it ourselves on human flesh, and, after using it for the past two
for bruises, cuts, corns, frost-bites, burns, sprains, rheumatism, neuralgia, or any
using on children from one or two years of age to men of mature years without
e slightest injury from using it *full strength*, but seeing always the most marked
results, we now recommend it, with the most perfect confidence, as the best lini-
ced before the public for any lameness or deep-seated pain in man. Especially
ommend it for bad cases of long standing. We care not if every other known rem-
tried and failed to benefit in the least; for in every case of this kind where Kendall's
as been (to our knowledge) applied two or three times a day, for two or three
s, a cure has been the result.

t take immediate effect, and sometimes there will be scarcely any perceptible effect
weeks; but while it may be slow in its effects in these cases, it always proves to be
followed up according to directions.

t for any difficulty of long standing, it should be applied for a long time, as such
not be removed in a short time. It can be applied with a feather, with a small
the hand; and by applying two or three times a day for several days, it will usually
to be a little sore on man, and we recommend that for all long-standing difficulties
after it becomes some sore just the same as before, until the disease is removed.
necessary at each application.

following testimonials showing its wonderful effects on human flesh.

HAT SOME OF OUR PATRONS SAY.

doubting the genuineness of any of the following recommendations is earnestly
orrespond with the parties themselves, and if a three-cent stamp is enclosed it will
o bring a reply.

St. Albans, Vt., Feb. 2, 1882.
B. J. Kendall & Co., *Gents:* — For
unity's sake, I wish to give in my
he good effects I have received from
our Kendall's Spavin Cure. I have
for four years with inflammatory
nd at times so bad I could not leave
eks at a time. Four months ago, by
e, I commenced using your Ken-
Cure, and to-day I rejoice that I can
se I am as good as new, and I most
all troubled as I have been might
neficial effects.

Yours truly, ALVAH LOOMIS.

The best method of applying a bandage so it will be smooth and even.

osburgh Falls, Vt., April 29, 1882.
dall & Co., *Gents:* — I most gladly
e great benefit I have received from
our Kendall's Spavin Cure. While
raising of the house of Alfred Rublee,
n June, 1881, I received a very severe
back by falling from one of the sills
oss a timber, and was taken up for
For a week or ten days I suffered
ain, and my friends nearly despaired
y. The directions of my physician were strictly adhered to, but with little bene-
My friends advised using your Spavin Cure, and bathed my back freely, and kept
saturated with it on my back, with the very best results. Very soon I commenced
d in a few days I was able to leave my bed, and to-day I am entirely well. And I
rfully ask all suffering humanity to use Kendall's Spavin Cure.

Yours truly, C. L. MASON.

following extract from a letter from L. D. and L. T. Hazen, large manufacturers and
ber of all kinds at Hazen's Mills, N. H., (dated Feb. 6, 1882): —
h, our board sawyer blistered his hand, got cold in it, eight weeks ago had one
T; proud flesh got into it three weeks ago; the doctor told him that it would have

to be unjointed in his hand, so as to get above the diseased part; but before having it done he consulted another doctor, who advised using caustic a few days. He did so, but without any benefit. Two weeks ago last Wednesday the joints of his other fingers were stiff, and he put some of Kendall's Spavin Cure onto them, and accidentally dropped some onto the end of the cut-off finger, the whole end of which was covered with *proud flesh*. The next day when they done it up they could see that where the Spavin Cure touched it that it was better; since then have used nothing but that, and it is nearly healed. He says he will warrant it to cure every time, and money would not hire him to be without it in his house in the future. Our idea was that this was a testimonial worth having, and therefore thought we would give you the benefit of it."

QUARRYVILLE, ULSTER CO., N. Y., March 23, 1881.

DR. B. J. KENDALL & CO., *Sirs:*—I have used your Kendall's Spavin Cure on a broken limb, which, after the bone had healed together, kept swelling at the ankle-joint for some years, and after using one-half bottle of your liniment I have not had a swelling upon it since, and the soreness is all gone, and can use my leg as well as ever. I am now using it upon my horses and family with the very best of results. We think it the best liniment we ever used. Enclosed find twenty-five cents, for which send me by return mail one of your books called "Treatise on the Horse and his Diseases."

Yours truly, PETER A. HOMMEL.

RICKETS.

ENOSBURGH FALLS, VT., April 20, 1882.

DR. B. J. KENDALL & CO., *Gents:*—In the Spring and Summer (up to July 15), my brother, B. B. Tillotson, was troubled with rheumatic lameness in the feet and lower limbs, insomuch that he was unable to use them at all at times. I asked him to try Kendall's Spavin Cure, as he had tried most everything else. When he made the first application he was unable to walk at all (this being in the evening); the next morning he could go about with ease, and in thirty-six hours he went into the hay-field to work, and has been perfectly free from lameness ever since. Thus, with less than one bottle of Kendall's Spavin Cure, an immediate and permanent cure was effected. Respectfully yours,

A. J. TILLOTSON.

WALPOLE, MASS., Oct. 29, 1881.

DR. B. J. KENDALL & CO., *Gents:*—Last spring I bought a young horse with a bone spavin. I used your Kendall's Spavin Cure and cured him of his lameness, and worked him hard all the time I was using it.

I have been troubled with a lame back since I was a boy, more or less, from over-lifting. Have used your Kendall's Spavin Cure, and have had no trouble since. I feel safe in saying it is the best thing I ever used for lameness or soreness on man or beast.

Yours truly, GEO. A. PIERCE.

CLUB-FOOT.

This can be successfully treated by any good surgeon.

VEVAY, INDIANA, Aug. 12, 1881.

DR. B. J. KENDALL & CO., *Gents:*—Sample of circulars received to-day. Please send me some with my imprint, printed on one side only. The Kendall's Spavin Cure is in excellent demand with us, not only for animals, but also for human ailments. Mr. Jos. Voris, one of the leading farmers in our county, sprained an ankle badly, and knowing the value of the remedy for horses, tried it on himself, and found it to do far better than he had expected. Cured the sprain in very short order.

Respectfully yours, C. O. THIEBAND.

NEWPORT, KY., April 3, 1882.

DR. B. J. KENDALL & CO., *Gents:*—I can say for your Kendall's Spavin Cure that it has cured me of rheumatism, and removed all the pain in my limbs, and taken all the pains out of my body. Yours respectfully, JENKIN EVANS.

BAKERSFIELD, VT., Dec. 23, 1879.

B. J. KENDALL & Co., *Gents:* — I wish to add my testimony in favor of your invaluable liniment, Kendall's Spavin Cure. In the spring of 1862, I slipped on the ice and sprained my right limb at the knee-joint. I was very lame, and, at times, suffered the most excruciating pain. I wore a bandage on it for over a year, and tried most everything in my reach, but could find nothing that would give permanent relief. When I overworked it would pain me very much. In April, 1878, I began to think I should be a cripple for life; but having some of Kendall's Spavin Cure, I thought I would try it. I used one-third of a bottle, and experienced relief at once. The pain left me and has not troubled me since. I feel very grateful to you, and would recommend Kendall's Spavin Cure to all who suffer with sprains or rheumatism. Yours truly,

MRS. J. BOUTELL.

DUNHAM, P. Q., March 10, 1879.

DR. B. J. KENDALL, *Dear Sir:* — About a year ago I fell in the road on to some ice and was badly hurt in the hip-joint, which caused me much suffering. I tried various remedies, but none gave relief until I tried your Kendall's Spavin Cure. I applied it, full strength, twice a day, for about two weeks during last October, and it effected a perfect cure. I have since then been well and free from lameness. It is very valuable for man as well as for beast. Yours truly,

CHESTER K. GREEN.

PATTEN'S MILLS, WASHINGTON CO., N. Y., Feb. 21, 1878.

B. J. KENDALL, M. D., *Dear Sir:* — The particular case on which I used your Spavin Cure was a malignant ankle sprain of sixteen months standing. I had tried many things, but in vain. Your Spavin Cure put the foot to the ground again, and, for the first time since hurt, in a natural position. For a family liniment it excels anything we ever used.

Yours truly, REV. M. P. BELL,
Pastor M. E. Church, Patten's Mills, N. Y.

N. B. — If our space would allow of it, we could print hundreds of letters here to prove that Kendall's Spavin Cure is the most wonderful medicine ever discovered for rheumatism, sprains, bruises, or as a general liniment for human flesh.

REMEMBER THAT WE CLAIM that no remedy has ever yet been discovered which equals it for all the purposes enumerated above. Every testimonial we print is genuine.

KENDALL'S SPAVIN CURE.

The wonderful success which has been achieved by this remedy has encouraged the proprietors to refine it *expressly for human flesh.*

No remedy has ever met with such unqualified success on all animals, and this has led hundreds to test its virtues on their own flesh. Thousands have found it to be sufficiently strong to penetrate and to have the real virtue to cure the worst cases of rheumatism, neuralgia, corns, bunions, warts, frost-bites, felons, chilblains, burns, or any pain, bruise, cut, or lameness which are not effected in the least by ordinary liniments. *It does not blister, but, on the contrary, removes soreness.*

For horses and other animals we recommend our patrons to use that put up in light wrappers, — retail price, $1.00. For man use that put up in red wrappers, — retail price, 50 cts. If desired, that put up for horses can be used on human flesh with perfect safety.

DIRECTIONS. — *Keep the bottle well corked.* Do not apply near a fire or any flame. *For rheumatism or neuralgia* apply to the affected part three or four times a day, and protect the part from the cold. Continue its use for several days, or weeks if necessary, until considerable irritation of the skin is produced; and, in bad cases, of long standing, continue to apply it for several days after the skin becomes irritated sufficiently to cause considerable smarting at each application. *For sprains, swellings, burns, bruises, frost-bites, chilblains, corns, felons, bunions, backache, headache, toothache, sore throat, — or any soreness of the chest, quinsy,* lameness, or pain caused by any mishap, we recommend to apply this liniment to the affected part two or three times a day, or oftener if necessary.

BRONCHITIS.—This disease consists in an inflammation of the air passages of the lungs. It is a very common disease among horses, and is sometimes confounded with inflammation of the lungs (or lung fever), distempers and colds.

A GENERAL SYMPTOM OF ABDOMINAL IRRITATION.

Symptoms.—Begins with a chill, fever, harsh cough, labored breathing, mouth hot and dry, with loss of appetite, and in one or two days a discharge from the nostrils will be observed.

Treatment.—Give the horse a good, comfortable place (not too close nor the reverse). Give fifteen to twenty drops tincture of aconite root, and repeat every four hours until six doses have been given, which will probably relieve the fever. Let the horse have plenty of cold water to drink. We would discourage the idea of bleeding, as it would be more likely to do harm than good.

After the fever has subsided (which will probably be about the second day), give the powders described on page 95.

Chronic Bronchitis is the result of bad treatment of acute bronchitis, and when the attack has been prolonged for some time.

Symptoms.—A cough which seems to be confirmed, with discharge from the nostrils, and cough worse after drinking and in the morning.

Treatment.—Take of pulv. gentian and pulv. sulphate of iron eight ounces each. Mix thoroughly and divide into thirty-five powders, and feed twice a day until all has been given; then make an ointment of red iodide of mercury one drachm, lard one ounce, thoroughly mixed together. Apply the above-named ointment down the course of the windpipe, and the next day apply sweet oil or lard to keep the skin from cracking. Repeat the application of the ointment in one week.

BURNS AND SCALDS.—When the burn is so deep as to destroy the skin and superficial tissues, we would recommend raw linseed oil, applied with bandages, to protect the parts from the air, and allowed to remain for several days.

But when the skin is not destroyed, we have found that Kendall's Spavin Cure is an excellent remedy for such burns on man; so we feel certain it will work equally well on any animal.

CALLUS.—A callus is a thickening of the cuticle or of any soft part caused by pressure or friction, or it may be the result of some injury, which after remaining sore for some time finally heals, leaving a thick, hard, and enlarged surface which we term callus, and which not only injures the sale of the horse, but is also a constant "eye-sore" to the owner.

Treatment.—We can only recommend one course, as we have had no experience with any other which proved successful, and that is to apply Kendall's Spavin Cure two or three times a day, for several weeks, as directed for spavin. These cannot generally be removed very quickly, yet if the above plan is followed out, it is sure to be effectual in time.

CAPPED ELBOW (Shoe Boil).—This enlargement on the point of the elbow is on the side of the chest just behind the shoulder. It is a tumor (or sometimes a simple abscess) caused by direct pressure against the calk or heel of the shoe; particularly, when the latter is allowed to protrude too far backward. Pads are made by harness-makers which are quite useful in protecting the parts while the horse is lying.

Treatment.—If the tumor is soft and shows signs of containing pus, it would be well to open it and allow the matter to escape. Some recommend that the tumor be dissected out with a knife, and then treated as any simple wound by keeping clean until it heals. Kendall's Spavin Cure has been used with very gratifying results for Shoe Boil. It should be applied twice a day for some time, the same as when it is desired to remove any enlargement. Some get an idea that if a bottle of Kendall's Spavin Cure is applied, it will do as much good to apply the whole in two or four days as to be as many weeks in using it, but we would like to have it remembered that it takes time to remove any enlargement, and especially if it has existed for any length of time; therefore we say it is not so much in the quantity used in a given time as in the length of time it is used. We know of no remedy that is so certain to remove Shoe Boil, when properly used, as Kendall's Spavin Cure.

CAPPED HOCK.—This is a soft swelling on the point of the hock joint. It is caused by kicking in the harness or stable, or by being kicked by another horse, and rarely causes any lameness.

Treatment.—Kendall's Spavin Cure used as for CAPPED ELBOW is a safe and sure remedy.

CAPPED KNEE.—Caused by some injury to the knee.

Symptoms.—A soft tumor in front of the knee.

Treatment.—If left alone it would probably burst and leave a permanent blemish. If the the tumor is hot, bathe first with cold water to reduce the heat, or bind on cloths wet with cold water, and change often; then apply Kendall's Spavin Cure as directed for CAPPED ELBOW.

CAUTERY (Firing).—This cruel and inhuman practice is one which has been practised in the past, and perhaps is to a slight degree now, but we sincerely believe it to be one which

doubt that ninety-nine out of every one hundred cases of belly-ache are no more nor less than colic, and not bots, and should be treated as we direct in the treatment of colic.

Treatment.—The general condition should be improved so that the debilitating effects of the bots may not interfere with the general health of the horse. It is generally considered impossible to expel or destroy the bots; but it has been reported to us by parties who claimed to have made the experiment, that bots would not live but a short time when placed in grated potatoes, and that attacks of bots have been relieved at once by feeding the horse four to six quarts of potatoes. We are very sure that potatoes when fed, say once a week, on some day on which the horse will not be worked, is an excellent thing for any horse; and if the above theory is correct (as it doubtless is), it may explain in part the valuable effect they produce.

Bots clinging to the mucous membrane lining the stomach.

Improve the general condition by giving the tonic and renovating powders described on page 95, in double doses for two or three times, unless it should act as a physic after the first or second dose, and then continue in heaping tablespoonful doses for some time to improve the condition.

Fundament bot.—Like the stomach bot, this is also the result of running out to grass. Instead of the eggs being deposited on the legs they are deposited on the lips of the horse. They are found in the rectum, and often seen about the anus and under the tail.

Treatment.—Injections of raw linseed oil, or of tobacco smoke.

Then give the renovating powders described on page 95.

BOWELS, INFLAMMATION OF.—The symptoms are very severe pain in the belly, varying from those of colic in being a continuous pain (while in colic there are intervals of rest from pain), rolling, pawing, sweating, rapid breathing, with an inclination to shift about, with great fever and excitement. The disease comes on more gradually than colic (which see), legs and ears cold, belly tender and painful on pressure. (See cut next page for position of nose, etc.)

Causes.—Constipation, exposure to cold, drinking cold water in large quantities when hot, hard driving, diarrhœa, and as a sequel to colic.

The above-named causes, when occurring in a horse predisposed to the disease, are quite liable to bring it on.

Treatment.—If the cause is constipation, give a quart of raw linseed oil, and, if necessary, add from four to six drops croton oil. If the cause is over-purging, give an ounce and a half of tincture of opium in a half-pint of waer. If the cause should be other than costiveness or diarrhœa, give thirty drops of the tincture of aconite root, and repeat it in two hours. Apply blankets, wrung out of hot water, to the belly, and renew them every fifteen minutes. Give injections of warm water (not hot), castile soap, and a handful of table salt every half hour until the bowels move some. There is a diversity of opinion in regard to bleeding. It is my opinion that it is of doubtful utility in this disease.

No. 1. The female about to deposit an egg.
" 2. The egg magnified.
" 3. The bot.
" 4. The chrysalis.
" 5. The male fly.

Another excellent remedy, which is always at hand, is one heaping tablespoonful of s
mixed with one pint of milk, and given at one dose.

Always begin the treatment as soon as possible.

Flatulent Colic, Windy Colic, etc. — The horse is uneasy, hangs the head, and

FIRST STAGE OF FLATULENT COLIC.

LAST STAGE OF FLATULENT COLIC

a few of the general symptoms of spasmodic colic before there is any enlargement of th
but more particularly after, for as soon as the belly swells the pawing commences, althou
not so violent as in spasmodic colic.

There is but little rolling or kicking at the belly as in spasmodic colic, and the hors
inclined to move about much. After from one to four days the belly becomes much incr
size (if the disease is not checked), and the animal becomes restless.

Treatment. — Do not bleed for flatulent colic. Try an injection first, and if gas
come away with it, the patient will most likely recover soon; but if no benefit is derive
the injection, give the remedies as recommended for spasmodic colic. Let the horse be led
quietly until the medicine has had time to take effect, so as to prevent his falling or rolli
might cause rupture of the diaphragm.

If the horse becomes bloated so much that it is evident to the spectators that he can
but a short time, tapping may be resorted to, although we do not recommend it to be pe
by an inexperienced person, as it is a dangerous operation for an ordinary person to p
If it is decided to tap the horse, cut a small place in the skin over the location of the gas, which can be found as indicated by the white places in the engraving, and by percussion on the left side. When the proper place is found it will give a hollow sound, when you practice percussion by placing one finger on the horse and striking it with the fingers of the other hand. Be sure that you find the proper place, for it will always give a hollow sound. Then take a *trocar and canula*, such as is shown in the back part of this book, and push it through the opening made in the skin, and then, after it has cut its way to the gas, withdraw the trocar, leaving the canula through which the gas will escape very rapidly. Remove any substance, which may stop up the canula, with a probe, which sh
provided before beginning the operation. As soon as the gas escapes the abdomen
reduced in size; then take out the canula and the opening will close up.

If it should be necessary to tap the second time on account of
being produced again, it is better to take a new place a short
from the place first used, so as not to open it a second time in t
place; but it is rarely necessary to perform this operation the seco
This operation is not always certain to effect a cure, but may be
to in extreme cases when everything else has failed, and when it is
that the horse must die without it. We would recommend to ge
sician to perform the operation, if a good veterinary surgeon ca
reached readily.

SITUATION OF A CORN.

CORNS appear in the angle of the hoof near the heel, and ar
ally caused by the shoes being worn too long, causing the shell of t
to grow over the shoe, which allows the weight to press upon the
the shoe gets moved from its proper position, or perhaps never wa
there. As a general rule, the production of corns may be laid to th

*Upon cutting away the horn there will be found a red spot; but if very bad, the colo
a dark purple, and it will be deeper seated.*

Treatment. — Dress down the bruised part until quite thin, and apply Kendall's Spavin Cure quite freely, and then put on the shoe, so fitted that there will be no pressure on the part. Apply the Spavin Cure for several days. If the above treatment fails (which it probably will not), then dress down the bruised part, thin as before, and apply Kendall's Blister (which will be sent by mail on receipt of 50 cts.), thoroughly rubbed in, and continue to apply Kendall's Spavin Cure, as recommended in treatment of BONE SPAVIN.

COUGHS. — A cough may be either acute or chronic. For different cases of coughs, see BRONCHITIS, HEAVES, etc.

Treatment. — We never yet have known of a case where the renovating powders, described on page 95, have failed to effect a cure. In some bad cases, or cases of long standing, they should be used freely, and in some cases for a long time.

CRIB-BITING. — This is a habit which is very unpleasant, and one which makes a horse unsalable, although not so serious a defect as has been represented by some. The act of cribbing consists of the horse grasping or pressing against the edge of the manger, or any other convenient place, with his teeth, as shown in the engraving; and then, after a convulsive action of the throat, there will be heard a grunting sound, accompanied by an apparent drawing in of air, although it is thought by many that, instead of this, a small portion of gas is eructated after some effort.

THE ACT OF CRIBBING.

Cause. — Unhealthy and poorly-ventilated stables, sameness of food, indigestion, and many times it is the result of imitation, if they see it practised daily by other horses.

Treatment. — Take out the manger, and feed the horse from the floor, leaving no place which is convenient for him to grasp with his teeth; this the most natural position in which a horse can take his food, and we believe it to be the best in any case, whether the horse has this habit or not; but this alone might not prove effectual in all cases, and therefore we recommend to place before the horse a lump of rock-salt, which will many times effect a cure, especially if taken as soon as the first symptoms are noticed, which are many times preceded by the horse licking the manger out all over the surface which is in his reach; if this does not prove effectual, place a lump of chalk before him. Attend to ventilating the stable, so as to give the horse pure air; then give the renovating powders described on page 95, to improve the digestion and condition of the stomach. Some recommend a strap buckled around the neck, which will usually stop it if buckled tight; but this is very injurious to the horse. Others recommend a muzzle, with bars across the bottom, which are far enough apart to allow the horse to get his hay or grain, but not to grasp the edge of the manger.

APPEARANCE OF THE TEETH OF AN OLD CRIB-BITER.

CURB. — This is one of the many diseases of the hock-joint, and consists of an enlargement or gradual bulging out at the posterior part of the hock. (See engraving).

SOUND HOCK. CURB. CURB. BANDAGE.

Cause. — Curb is generally caused by a strain from galloping on uneven ground, wrenching the limb, prancing and leaping, etc. It is one of the evils which occur among the better breed of

horses. Man delights in showing off the animal he is mounted upon, and so it has ever been with man, woman, or child; they are always pleased by the prancing of the horse, which, nevertheless, is a very fruitful cause of curb. Pulling horses up suddenly on their haunches is asserted to be a frequent cause of curb.

Treatment.—Perfect rest; if hot, bandage it and keep it constantly wet with *cold water* and saltpetre for a few days until the inflammation has ceased, then apply Kendall's Spavin Cure two or three times a day, and rub well with the hand. In some cases it is well to apply the bandage after each application of Kendall's Spavin Cure, always applying the bandage as smooth as possible and rather tight. In very bad or very old cases we would recommend using Kendall's Blister, as directed for RING-BONE.

THE SUREST METHOD OF PRODUCING CURB.

DEBILITY.—This condition accompanies many diseases; for this reason, anything which has a tendency to reduce the strength of the horse should be avoided while treating the various diseases, especially of the chest.

Symptoms of general debility are swelling of the legs, breast, belly and sheath. The horse is very weak, and staggers as he walks.

Causes are bleeding in treating diseases, starving, and insufficient and improper diet given to sick horses when they should have been supported by good and sufficient food during their sickness.

Treatment.—Give the tonic renovating powders which we recommend under the head of BOTS, two or three times a day, with a liberal amount of good feed and water, and allow him to recover wholly before putting him into hard work.

DEFORMITIES IN YOUNG COLTS are usually caused by an insufficient nourishment; but if the colt is taught to suck milk from a bottle or something else, so as to become well nourished, deformities of the limbs will usually be removed.

DIARRHŒA.—When this disease is not attended with pain, griping, or pawing, as in colic, it will generally require no treatment; but if it continues, and the horse shows signs of pain or colic, there is reason for the belief that there is some irritating poison retained in the bowels which does not pass away in the excrement. (See DYSENTERY.)

Treatment.—Treatment that will allay pain is demanded.

Give twenty drops of tincture of aconite root in a little water, and follow with a powder as given below, every three hours, until the horse is better. Take prepared chalk five drachms, catechu (pulverized) one drachm, pulverized opium ten grains; mix, and give as stated above. Give plenty of good cold water to drink.

When the diarrhœa is better, give bran mash for a few days, and add a little ground flaxseed, if convenient; then give the powders advised for bots.

SUFFERING FROM THE EFFECTS OF A POWERFUL POISON.

DYSENTERY, ACUTE.—This disease in the horse is very violent, because the length and size of the intestines of the horse render any disease within them a very serious affair.

Cause.—Acute dysentery is caused by taking some acrid substance into the stomach, such as croton oil with aloes, which produce an inflammatory purgation; or from the injudicious use of various poisons such as tartar emetic, corrosive sublimate, blue vitriol, arsenic, etc., etc. Nearly all of these substances will be eaten readily if mixed with the grain, therefore any person not knowing the proper quantities of such poisons to give, should not venture to use them.

Symptoms are obscure at the commencement. As in nearly all disorders of the intestines, so in this, there is pain in the abdomen. The pain may be slight at first, or it may be so violent as to be confounded with the pangs of colic; the thirst is excessive; the stench offensive.

The position of the body, as shown in the engraving, is expressive of abdominal pain.

Treatment the same as for diarrhœa, with larger doses of opium when the pain is violent. Keep the horse and stable clean, and give the horse good care. Do not be concerned about the bowels if they do not move at all for several days.

DISTEMPER (Strangles). — This form of sore throat is characterized by swelling between the bones of the lower jaw, which terminates in an abscess.

STRANGLES.

Cause. — A specific poison in the blood, which but few horses escape.

Treatment. — The opinions of different veterinarians vary in regard to the treatment, some recommending poultices, while others forbid it, etc., but the following plan is undoubtedly as good one as any: —

Give grass or soft feed, and procure the renovating powders and use as recommended for PINK EYE or EPIZOOTIC. If thought best to do anything to hasten the suppuration, apply warm poultices, or some like blistering. The appetite will return when the abscess breaks or is opened.

EPIZOOTIC. — This disease attacks many animals at the same time, and originates in one common cause; but just what this cause may be, it is very difficult to ascertain; yet it is evident that it is from a miasmatic influence, which has a tendency to spread rapidly over the country.

Symptoms. — The attack is abrupt. There is debility, stupor, eyes half-closed, disinclination to move, cracking joints, deficient appetite, mouth hot, constipation, urine high-colored and scanty, pulse weak and a little faster than normal, deep, painful cough, trembling at times, hair rough, limbs and ears are alternately hot and cold.

Soon there is a discharge from the nose of white, yellowish, or greenish matter, and the horse may recover, or complications may arise which are liable to cause death.

Treatment. — Give the horse a good comfortable place, with good care and a good warm blanket. Give bran mashes and other proper nourishment, and then give the renovating powders described on page 95, and continue their use freely until the horse is fully convalescent. The above renovating powders have been used in a very large number of cases, and have proved, beyond any doubt, that they are the very best medicine that could possibly be compounded for this disease; and we recommend, when epizootic is prevalent, to give them to all horses, as they will do no harm to any, and they will so renovate the system, and purify and enrich the blood, that horses taking these powders will not be so liable to have the disease, and the disease will be rendered more mild in those which do have it; the above result has been observed in other diseases. Kendall's Spavin Cure is applied externally to the throat with good results.

Caution. — Do not leave horses sick with this disease without any extra care, or without proper medical treatment, for two reasons: first, it is cruel and inhuman; and second, it is not profitable; for the cases which are left to themselves are very liable to have some complications arise which will either cause death or leave the horse in bad condition, from which he may not recover for a long time, and perhaps never; but we never knew of the first case which did not fully recover when the above-named powders were given freely, with proper care of the horse.

FARCY. — This is a scrofulous disease affecting the horse.

Symptoms. — The hair looks rough and unhealthy; one of the legs will generally swell to a very large size, generally the fore leg — hot and painful — and in a short time will break out in small running sores, discharging a thin, unhealthy fluid, and sometimes the discharge is thicker.

On the side of the neck, body, or inside of the leg, will be felt a thick substance under the skin, but somewhat elevated and hardened, and interrupted at distances with a small sore similar to that on the leg. In some cases soft, puffy swellings will be found about many parts of the body.

Cause. — Poorly-ventilated stables, which are overcrowded with horses; inoculation from the virus of the glandered or farcied horses, and this virus producing a ferment in the blood. Absorption of pus into the blood is liable to produce either farcy, glanders, or some other zymotic disease.

Treatment. — Understanding the cause of this disease you will readily see what the treatment should be — that by removing the cause the effects will cease. Give a tablespoonful of sulphite (not sulphate) of soda twice a day.

This remedy will stop all fermentation and purify the blood. It would be well to continue the sulphite of soda two or three times a week for a few weeks after the horse seems to be well.

After leaving off the sulphite of soda give the renovating powders, as directed in the treatment for bots, freely, to improve the general condition of the horse. Give good and generous feed.

Another plan is to give the following powders once a day: take sulphur eight ounces, saltpetre four ounces, black antimony two ounces; mix, and give one tablespoonful, and give the renovating powders twice a day.

Another mode of treating this disease is to give two drachms of sulphate of copper every *night, in the food, until the horse* refuses to eat. After a few days, repeat; but if the case is *bad, give the medicine as* a drench in water, for ten days, if he will not take it in his food.

The horse, as well as all his clothing and articles used in feeding him, should be removed from all healthy animals, as this is one of the contagious diseases of the horse.

FIRING HORSES.—I can fully indorse the following statements of Dr. Robt. McClure in regard to this inhuman practice. He says: "This is an operation which is a great favorite, and in much repute among horse doctors. For my part I think it not only cruel and barbarous, but unnecessary, doing no good whatever, and in many cases a positive injury, the effects of which will never disappear from the legs and body while the animal lives. Firing is intended by its advocates to prevent and cure spavin, curbs, sprains, and ring-bones, by scoring the parts with a red-hot iron in lines over the part that is thought will *be* diseased or is already so." (See CAUTERY.)

FOOT DISEASES (*Navicular disease*).—(See engraving on cover for location.)

This is a serious disease, and is sometimes very obscure in its symptoms, according to the stage of the disease. Fortunately this disease is rarely met with, but it is a fruitful cause of permanent lameness. It is many times attributed to some difficulty in the shoulder.

1, the cannon bone; 2, the large pastern bone; 3, the small pastern bone; 4, the pedal bone; 5, the navicular bone; 6, the insertion of the extensor podis tendon into the coronary process of the pedal bone; 7, the insertion of the flexor pedis perforans; 8, the elastic frog; 9, the horny frog; 10, the hoof; 11, the coronet.

Cause.—Hard work upon pavements causing slight inflammation which is neglected, and the horse kept at work so that the inflammation continues until it ends in ulceration.

Symptoms are obscure and yet very much like many of the symptoms of other diseases of the feet and legs and shoulders. It is determined chiefly by an undue amount of heat in the foot, and by the fact that no disease can be found elsewhere or of a different character.

Treatment.—Raise the foot, and pour Kendall's Spavin Cure on to the frog, and the back part of the foot and heel, and rub it well up into the hair, repeating this process two or three times a day, for two or three weeks, or more, if necessary. In bad cases, if the lameness does not subside in two or three weeks, we would recommend to blister as recommended for RING-BONE, and follow up with the use of Kendall's Spavin Cure. The above treatment has proved to be the most satisfactory of any treatment know to us.

Poultices sometimes relieve the pain.

FOUNDER (Laminitis).—This disease is inflammation of the sensitive laminæ of the foot, of which there are two kinds, acute and chronic, the latter being a continuation of the former. The acute form is invariably cured, if properly treated, but the chronic form is generally considered incurable; it can be relieved very much, but the feet are always afterwards sore and tender in front.

Cause.—Allowing to drink cold water, when overheated and tired from overwork, standing in the cold air (or where the wind will strike the horse) while warm, driving through a stream of water while warm, long and hard drives over dry roads, etc.

Symptoms.—The horse will stand upon his heels, with fore feet and legs stretched out as far as he can get them, so as to throw the weight off as much as possible; and he can scarcely be made to move. The horse has fever and considerable constitutional disturbance, in the acute form of the disease.

Treatment (*of acute founder*).—Give the horse a good bedding of straw, in a large, well-ventilated stall, so as to encourage him to lie down, which, by removing the weight from the inflamed parts, will relieve his sufferings very much, and assist in hastening the cure. As soon as his bed is fixed, give him twenty drops of the tincture of aconite root in a half-pint of cold water, poured into his mouth with a bottle, having a strong neck, and repeat this dose every four hours until six or eight doses have been given. Also apply a cloth wet in ice-water to the feet, and keep wet with the same for several hours, until the severe pain has been relieved. Wet the cloths often, and continue for two or three days, or longer if necessary. Give plenty of cold water to

drink. The above treatment should be adopted as soon as possible after the horse has been attacked with founder. Let the horse have rest until he has fully recovered. Give grass or mashes for two or three days, and then give a good and fair amount of feed.

After the treatment recommended above, if there should still be tenderness, we would recommend the use of Kendall's Spavin Cure to remove it, as directed for foot diseases.

Although bleeding is quite strongly recommended by some, yet I am firmly of the opinion that the above plan, if properly carried out, will be much more successful.

CHRONIC FOUNDER in its worst form is not curable, but may be palliated. The treatment should depend principally upon softening the hoof by oiling well with castor oil, and continuing to keep the hoof well oiled on the bottom and sides up on to the skin.

We would also recommend in shoeing, to place a piece of sole leather which will cover the whole of the bottom of the foot under the shoe, and drive the nails through the leather so as to hold it as long as the shoe remains on, then pack oakum or cotton-batting saturated with tar under the leather, so as to soften up the bottom of the hoof. This works admirably in many cases.

Some pare the soles of the feet and then allow them to stand in about six inches of sawdust, wet a little every morning for two or three weeks. This is also a good plan to follow when horses are recovering from acute founder.

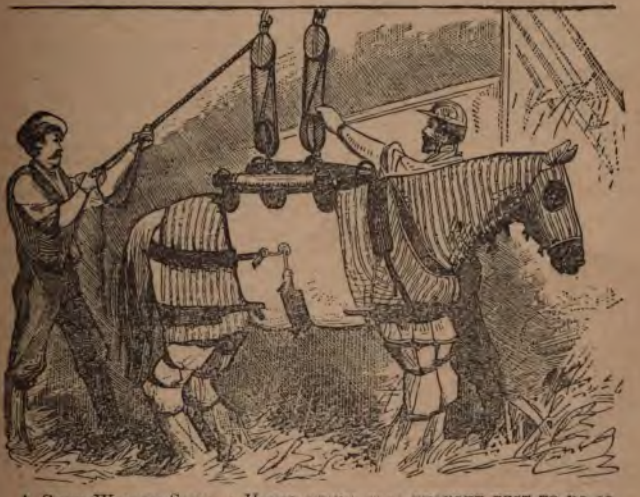
The treatment most likely to effect a permanent cure is that recommended for FOOT DISEASES, which see.

FRACTURE.—The term fracture is here used to signify a broken bone. A fracture is termed *simple*, when the bone only is divided; *compound*, when in addition there is an external wound of the integuments communicating with it; *comminuted*, when the bone is broken or crushed into several pieces.

The simple fracture is the only variety which calls for much notice, in view of the fact that it is usually of but little use to attempt to treat either of the other two varieties.

Many cases of simple fracture may be successfully treated so that the horse will be useful for many purposes, if not for driving.

Symptoms.—A broken bone is usually detected quite easily, especially when it is a long bone of the leg, as the horse has not the power to move, and also by the looseness of the leg. The horse is in great pain, excitement, sweating, etc.



A GOOD WAY TO SLING A HORSE WHEN IT IS THOUGHT BEST TO DO SO.

Treatment.—If in the summer season, place the horse in the field or yard, but in winter in a large, comfortable stable or in the barn-yard, if well protected from wind and storm. Do not give too much bedding nor allow anything to be in the way of the foot, so that it can be carried without interruption. Give twenty-five drops tincture aconite root every five hours, for the first twenty or twenty-five hours, to lessen the fever and pain.

Place the broken leg in a position as near like the other as possible in shape, and also lay

actual measurement) to be of the same length, for it is by neglecting the measurement that so[illegible]ne are left to unite shorter than the sound leg.

When the leg is placed in the same shape and length of the sound one, apply a good coat[illegible]ng of tar to the leg, around, below, and above the point of fracture. Then wrap the whole leg [illegible] in carded cotton or coarse tow, and place over this splints cut out of pieces of boards, which [illegible]ill rest evenly upon the leg prepared as above, and fill all unevenness with the tow or cotton.

Have three or four splints, so as to hold the leg in position constantly. Secure the whole [illegible] by carefully applying a strong bandage, or by tying with soft cord, and make it perfectly secure [illegible] so that the horse will not move the leg where fractured before it has had time to unite.

It is considered by some as bad practice to sling a horse from his feet in cases of fract[illegible]re, and he will seldom put his foot to the ground until the fracture has united, so it is not neces[illegible]ry to sling.

Examine the splints daily and see that they do not get loose.

Give the horse a liberal amount of good feed and cold water.

When the horse is kept in a stall it is well to make a hole in the floor, underneath the foo[illegible]t of the broken leg, so that he can stand with the leg at full length.

With the splints properly applied, the horse may safely be left to himself, and nature wil[illegible] do the rest.

FROST-BITES.—A state of numbness or torpifaction of a part of the body, caused [illegible] by intense cold, which, unless relieved by proper remedies, is liable to be followed by death of [illegible] the part. Horses are most liable to be troubled with frost-bites on the heels and the back part of [illegible] the hind legs, which swell badly, and are sometimes mistaken for scratches.

Treatment.—It is very important in the treatment of frost-bites that heat should not [illegible] be applied suddenly, but that very cold water be applied, by which means the frost is extra[illegible]ted slowly.

Any frozen parts should not be rubbed until the frost has been extracted.

After the heat has returned to the part, we know of nothing which we think will work better than Kendall's Spavin Cure, applied several times, as by so doing the great pain and soreness which is sure to follow is generally averted, and thus the bad running sores which sometimes follow are prevented. The above treatment is also well adapted to frost-bites on man.

GLANDERS.—This disease is alike fruitful of evil to man and beast, and is generally considered incurable.

A horse may have latent glanders for years, and work well, the disease being during thi[illegible] time as contagious as in its developed state.

Cause.—The cause is somewhat varied in different cases, and may be attributed to filth[illegible] starvation, or to debilitating diseases, as lung fever, catarrh, or any disease capable of generating [illegible] pus, which, being absorbed into the circulation, forms a ferment within the blood.

Symptoms.—The membrane lining the nostrils assumes a leaden or purple color, accom[illegible] panied by a thin, acrid, transparent, and odorless discharge. This is the first stage, durin[illegible] which the general health does not suffer, and the horse may do his ordinary work.

The discharge grows thicker, and sinks when placed in water. The membrane lining th[illegible] nostrils will be found to have sores, ragged and depressed at the top, with varicose veins leading [illegible] to them from all sides.

The appetite fails, and the horse assumes an emaciated and dull appearance. He will be [illegible] hide-bound, and his legs swell during the day and the swelling go down at night.

The ulceration of the nose is very bad, and the sores spread into his throat; the body also is [illegible] sometimes afflicted with sores. The horse ultimately dies in a wasted condition.

Treatment.—Most horsemen recommmed that the horse be shot as soon as it is decided [illegible] that he is afflicted with glanders, as they consider the disease incurable. If the following treat[illegible] ment is adopted early it may prove successful in occasionally a case.

Give from one-half to one ounce doses of sulphite of soda at night, in cut feed, for seven [illegible] weeks, and five grains Spanish flies (powdered) with it. Give, at the same time, every morning [illegible] and noon, a powder consisting of three drachms powdered gentian, and two drachms powdere[illegible] sulphate of copper. Give the medicines for a long time, not only to cure the disease but to im[illegible] prove the general health. Give a good liberal feed, and change the feed often.

GREASE HEELS.—This disease of the heels and legs of horses is characterized by white, offensive, greasy discharge from the heels of the horse. The skin becomes hot, tender [illegible] and swollen, and sometimes sloughs away, leaving an ugly sore.

Cause.—Sudden changes of the temperature of the earth, whether it be from heat to cold [illegible] from dry to wet. This disease generally follows wet streets, stables, or lands.

Treatment.—Keep the legs dry and cleansed well with castile soap and soft water; the[illegible] apply, once a day, verdigris one-half ounce, rum or proof spirits one pint; mix, and shake we[illegible] before applying. Or apply Kendall's Spavin Cure after washing well. Some use water or [illegible] pint, sulphuric acid two drachms, corrosive sublimate one drachm; mix, and shake before [illegible] using. Some cases will be cured by keeping clean, and applying glycerine four ounces, carbolic acid one drachm; mixed, and applied twice a day. While some cases are cured quite readily, others will not heal for a long time. Always use the renovating powders described on page 95. We never knew Kendall's Spavin Cure to fail when used thoroughly. (See SCRATCHES.)

For obstinate cases use the following: Take one pound concentrated lye and dissolve it in two quarts water, and bottle for use; when needed, pour a wine-glassful of the solution of lye into six quarts of cold water, and wash and bathe the heels for half an hour, night and morning. Dry the heels often after the bathing, as they will become very moist. (See SCRATCHES.)

HEAVES. — This disease is due to rupture and enlargement of the air-cells of the lungs, which lessens the value and usefulness of the horse.

There is every degree of intensity to be seen in this disease, from the case that is so slight that only the expert can detect it, to the one where the patient finds it *very* difficult to breathe, even when not being exercised.

Cause. — In cases of heaves, horses are always greedy eaters; and it is generally found that they have been fed an enormous amount of hay or coarse food, which they are quite sure to eat if they can possibly find room for it.

Heaves are never found in racing stables, where the horses are properly fed; consequently, it is but reasonable to attribute the cause to overfeeding with hay and coarse feed.

Treatment. — Restrict the quantity of hay and increase the amount of grain feed, which will give the lungs increase of room to act.

Give the renovating powders described on page 95 freely, and in large doses; and if these powders are continued for a sufficient time, and the food properly regulated, it will be quite sure to cure nearly every case, and place the horse in excellent condition.

LISTENING TO THE SOUNDS MADE WITHIN THE WINDPIPE.

FAVORITE RECEIPTS FOR HEAVES.

1st. Assafœtida pulverized one ounce, camphor gum pulverized one-half ounce; mix, and divide into four powders; feed one every other night for a week.

2d. Resin two ounces, tartar emetic two ounces, Spanish brown two ounces, cayenne two ounces; mix, and give two teaspoonfuls twice a day in the feed.

3d. A horseman with whom I am acquainted says he has cured several cases of heaves with oil tar. He gives the ordinary case a teaspoonful every night or every other night, by pouring it on to the tongue, and then giving some grain which carries it into the stomach.

He says he has given very bad cases two or three tablespoonfuls at a dose with grand results.

HIDE-BOUND. — A term used to denote the adherence of the skin to the ribs when the horse is diseased. It usually arises from a deficiency in the quality or quantity of food, or is commonly an attendant on lingering diseases with impoverished blood.

Treatment. — Give mixed feed — cut hay, bran and corn meal, wet with just enough water to cause the whole to keep together, and give the renovating powders described on page 95, three times a day for several days, and then continue twice a day until the horse is in good condition.

HINTS ON FOOD. — 1st. The foundation of many diseases is laid in feeding all horses in the same proportions, without any regard to age, constitution, or the work which the horse is required to do. The impropriety of such a course is readily seen.

2d. Bad hay has not proper nourishment in it; therefore it would be poor policy to buy it simply because it is cheap, as it is often very dear in the end.

3d. Old horses will do better on chaff than on hay, as they can chew and digest it better.

4th. There is not sufficient nutriment in grass or hay alone to support a horse well under hard work.

5th. Corn which has been damaged is very injurious, as it will produce inflammation of the bowels and skin diseases.

6th. Oats and corn are the best nourishment if a horse is worked hard, but if not, it should be chiefly hay, because corn and oats supply more nourishment and flesh-making material than any other kind of food; but hay not so much.

7th. For a coach horse, four to six quarts of good oats and eighteen pounds of good hay are usually sufficient. If a horse should be worked hard, he should have more of each; but if worked but little, he should have less.

8th. Chopped hay sprinkled with a little water, which has had a teaspoonful of salt dissolved in it, is quite pleasing to the taste of the horse, and is also more easily digested.

9th. Spring or well water is not usually as good for a horse as water from a stream or pond, as the former is usually hard and cold.

10th. Horses require and should have at least a pailful of water, morning and evening; or, what is better, give a half-pailful at four different times in a day, and before eating is preferable to after.

11th. A horse should not be driven or worked hard directly after he has had a full draught of water, nor soon after eating heartily, as exertion prevents digestion.

12th. Do not allow a horse to become accustomed to drinking warm water, for if compelled to drink cold at any time it will be liable to cause colic.

13th. Do not work or drive a horse if he refuses his food after drinking, until you have given him rest.

14th. Do not feed nor water a horse directly after his coming in very warm, but let him walk about until cool; groom him quite dry first, with a wisp of straw, and then with a comb and brush, and rub the legs well with the hand. When he is cool give him his grain.

HIP-JOINT LAMENESS. — This disease is generally seen in young horses, and is be caused by rheumatism or by some accident, although it is due oftentimes to a hereditary ta

Symptoms. — The leg appears shorter, and, when the horse is standing, is placed sligh under the body and not doubled up, or standing upon the toe, as is seen in diseases of hock-jo In nearly all cases of so-called hip and whirl-bone disease, the true seat of disease will be fo to be in the hock-joint. (See SPAVIN.)

In hip joint lameness there is a dragging or swaying motion of the limb, outward. An e degree of heat will be found over this joint.

Treatment. — Give the horse absolute rest for a few weeks, and begin, when first allowe rest, to apply cold water cloths over the hip-joint, which continue one or two days, or more, the heat and tenderness have been removed.

Then apply Kendall's Spavin Cure two or three times a day for two or three weeks, or lo if necessary, and allow a week's rest after stopping its use. Use our Blister if necessary.

INFLAMMATION OF STOMACH *is caused* generally by some poison given to prove the coat of the animal. Some persons are in a habit of giving powders composed of po ous drugs to improve the general appearan the horse, and which, if given in proper quan and sufficiently diluted, so as not to come in tact with the coating of the stomach while i full strength, might perhaps do good in f cases, but when given by an ignorant person, sometimes given not only full strength, bu large doses, on the principle that, if a little wi good, a larger amount will do more good.

SUFFERING FROM ACUTE INFLAMMATION OF THE STOMACH.

Symptoms. — The horse is frantic on acc of the excessive pain, but the symptoms are decided in all cases.

The following symptoms occur, but not each case, nor do they occur simultaneo Great thirst, loathing of food, redness of the branes, frequent eructations, which smell discharge of thick saliva, rolling, pawing, striking at the belly, panting, tucked-up fl quick and small pulse, passing mucous in quantities, straining, looking at the abdomen of strength, convulsions, madness, and death

Treatment. — Give at once two ounces ture of opium, one and one-half ounces sulp ether, and two ounces magnesia, in one qua *cold* gruel or milk, and repeat if necessary.

If corrosive sublimate is known to b poison, give fifteen or twenty raw eggs with the above drench.

INFLUENZA. — (See PINK-EYE and EPIZOOTIC.) An epidemic disease occurring b Spring or Fall of the year.

A FREQUENT SIGHT WHEN IT WAS THE CUSTOM TO BLEED AND TREAT TOO ACTIVELY IN THIS DISEASE.

Symptoms. — A chill, succeeded by increased heat of the body, and fever, cough, dis of mucous from the nose, loss of appetite, great prostration, followed in a day or two with

ing of the legs, and, in some bad cases, of the belly, breast, etc. These symptoms vary some in different cases.

Treatment. — Cover the horse with a good blanket, and place him in a good comfortable stable, with proper ventilation, but not too cold. Give twenty drops of tincture of aconite root in a little cold water, every four hours, until four or five doses have been given, and allow the horse plenty of good cold water to drink.

The renovating powders recommended for PINK-EYE should be given freely as recommended for that disease, as they are the best medicine that can be given for this disease, if given freely for a sufficient length of time.

INTERFERING. — This is usually the result of weakness of the horse, although the blacksmith is frequently blamed for it, and perhaps justly, sometimes, on account of being somewhat careless, when the interfering might have been avoided with a little care. Yet the cause is generally weakness.

Treatment. — Give the renovating powder recommended for the treatment of bots, and feed well, and have properly shod.

KIDNEYS, DISEASE OF. — The straddling gait, as represented in the engraving below, is not peculiar to any one disorder of the kidneys more than to another, but when it is seen it is always the result of some disorder of the kidneys.

Gravel. — Calculi, stony or gritty matter formed in the kidneys, which passes off in the urine. It causes some irregularity in making water.

Treatment. — Give thirty-five drops of muriatic acid, in a pailful of water to drink, and repeat twice a week.

Bloody urine should be treated by placing warm water cloths over the back, above the kidneys, and giving flaxseed tea to drink, which will soothe the parts. When old horses are troubled with kidney diseases they can be helped a great deal by giving soft feed, such as boiled or steamed feed, or newly cut grass, with flaxseed tea and plenty of good cold water to drink at all times. Give the renovating powders described on page 95, to renovate the blood and whole system.

SYMPTOMS OF DISEASES OF THE URINARY ORGANS.

Inflammation of the Bladder. — Symptoms almost the same as those of inflammation of the kidneys. The tenderness is found when the horse is pressed upon, under the flanks.

Treatment about the same as for inflammation of the kidneys, which see. Give a quart of raw linseed oil or other physic, as for inflammation of the kidneys.

Inflammation of the Kidneys is caused by poor provender, hard work, slipping, taking a sudden cold after a hard day's work or drive, or after being under the saddle for a long time; and also, by an indiscriminate use of nitre or other diuretics.

Symptoms. — Quickened and short breathing, suggestive of pain; more or less fever, with quick, hard pulse; unwillingness to move the hind legs which the animal straddles apart when he walks, as shown in the engraving above; looking anxiously around to his flanks; urine scanty and high colored, and sometimes bloody. The horse seldom lies down and almost refuses to move about, and crouches beneath pressure made over the kidneys, as shown in the engraving. This disease is sometimes confounded with COLIC, which see.

TEST FOR INFLAMMATION OF THE KIDNEYS.

Treatment. — Do not give any diuretics to increase the water, as they will do more harm than good. Use hot fomentations over the kidneys, and change the cloths often. In the first stage give twenty to forty-five grains of powdered opium, and fifteen grains of calomel, sprinkled on the tongue, and repeat every hour or two, for a few times, or while the acute stage continues. No food will be necessary during the acute stage of the disease, but it would be well to set before the horse a pailful of good linseed tea and allow him to drink all he will. If the pulse is quick and hard, as is usually the case, give twenty drops of tincture of aconite root, either between

doses of opium and calomel, or after it has been given, and repeat until the pulse becomes slower and softer. Then give the renovating powders described on page 95, to place the horse in good condition.

Give the horse a month's rest, and use carefully for some time.

LAMENESS. — It occurs as a symptom in spavin, ring-bone, bruises, sprains, fractures, and many wounds and injuries, which we treat of in their proper places. We do not know of any remedy which equals Kendall's Spavin Cure, for lameness of every kind, and it is equally good for lameness on man.

LAMPERS (written also *Lampass*). — A swelling of some of the lower bars of a horse's mouth; so named because formerly removed by burning with a lamp or hot iron.

Treatment. — Pinch or cut the bars until they bleed, and then rub in a little table salt, which is much better than burning the mouth with a red-hot iron.

LUNGS, DISEASES OF. — The lungs are subject to many diseases.

Pneumonia (*Lung Fever*). — In this disease the substance of the lungs is inflamed, instead of the air passages, as in bronchitis.

COMMENCEMENT OF INFLAMMATION OF THE LUNGS.

Symptoms. — The horse will oftentimes have a discharge from the nostrils, following a sudden exposure to cold, after being kept in a warm *stable*, and then the disease is ushered in by a chill, followed by fever, which is increased for a short time; cold legs and ears; quick and wiry pulse; quick and difficult breathing; pain in the chest, which is aggravated by coughing; and a quivering of the muscles of the side and breast.

The horse will not eat, and continually stands with his head down and ears lopped, and will not lie down nor move about; the nostrils are expanded. If the ear is applied to the side of the chest or neck, a peculiar creaking noise is heard.

Cause. — Perhaps one of the most frequent causes is a hard or fast drive against a *cold* wind, after being taken from a warm, tight, and poorly-ventilated stable, where several horses have remained through the night; or some different alteration and sudden change of heat, cold, or moisture in an animal not accustomed to work, or in one not in proper condition to work.

Treatment. — The stable should be a comfortable place; not too cold, and yet *well* ventilated. Give the horse clothing according to the weather, but do not change from a heavy blanket to a light one, nor to one that is damp. Keep the legs warm with bandages.

POSITION ASSUMED IN THE LAST STAGE OF PNEUMONIA.

Give twenty-five drops of the tincture of aconite root, in a cupful of cold water, and repeat the dose every four hours, until five or six doses have been given, which will probably cause the horse to perspire freely. Care should be taken not to allow the horse to stand in a draft of air. Do not bleed, as some recommend. It was my misfortune, in my early life, to place a horse sick with this disease, under the care of a *so-called* veterinary surgeon, who bled the horse freely, and directed to give him large doses of Dover's powder every four hours. I was not only the five dollars out which he charged me, but came very near being out a good horse. The horse was about ruined for life, and probably would not have lived but for my own timely interference, by supporting the horse with vigorous tonic and stimulating treatment. When the disease turned (as commonly expressed) the horse needed *every drop* of the blood which had been so cruelly taken from him.

After the horse has taken sufficient tincture of aconite root, as soon as he seems to have an appetite for food, a pint of crushed oats, thoroughly scalded, may be given during the day. Great care should be taken not to allow the horse a large amount of food at one time, which would overload the stomach, and might cause a return of the disease. Little and often must be the rule at first, and then the quantity may be increased, while the frequency is diminished. Do not give any hay for several days.

Raw eggs and other nourishing and stimulating articles may be given, if the horse shows signs of great weakness. The nourishment should be in a concentrated form, and hay and grass should be kept from the horse for a few days, and then given in quantities small at first and gradually increased. The horse will not lie down until improvement has taken place. The horse should be strengthened and built up by giving the renovating powders described on page 96, and

these should be continued two or three times a day until the patient is past danger of being left with a chronic cough, or any other bad derangement.

PINK-EYE.—The name "pink-eye" has been extensively used in this country during the severe epidemic which occurred in the Fall of 1881, to designate an *epidemic distemper*. This disease, although not by any means a new disease, prevailed to an alarming extent during the last epidemic; but it prevails more or less in some parts of the country in a milder form almost every Spring and Fall, and is more likely to attack horses in crowded cities than those of the country. At times, it seems to be contagious, especially among young horses. It is a species of influenza.

Symptoms.—At first the horse appears dull, with a disinclination to move; the knees tremble, the eyes are swollen and look reddish, especially in the inner corners, and the lids are also swelled and red; the eyes are quite sensitive to light, and are stuck up with pus. The membrane lining the nostril is red, and appears inflamed, as well as the membranes extending into the throat. More or less discharge from the nostrils, and swelling and tenderness of the glands of the neck and throat. There is considerable fever from the beginning, and the hind legs swell, first one, and then the other, and this swelling sometimes extends up to the sheath and along the belly. The tongue is foul, appetite poor, the urine scanty, bowels constipated, the saliva or matter runs freely, and it is with difficulty that the horse is able to swallow. In some cases, the swelling under the jaw suppurates and leaves an abscess. There is usually considerable loss of strength early in the disease. The cause seems to be a variable state of the atmosphere, or sudden changes from heat to cold or dry to wet, and as this may vary in its extent and character in different seasons, we find that there is some difference in the extent as well as the symptoms of different epidemics; that is, the cases which occur this year which may only extend over some particular part of the country, will have certain symptoms common to most of those it attacks, and which, perhaps, has not occurred in any epidemic for years. The disease often leaves the horse in a bad condition, and bronchitis, nasal gleet, or glanders may result from it. If the horse is not in much distress, coughs strong, does not appear weak, eats well, with a moderate pulse, and the discharge appears healthy, and of only moderate quantity, there will usually be but little danger if properly cared for; but if there is great prostration, with inordinate local and constitutional symptoms, the danger is very great.

Treatment.—Blood-letting, as practised by some, is very injurious, and should never be practised; but an entirely opposite plan adopted.

Any person, who will take into consideration the state of the patient, will readily see that if prostrated, he should be strengthened and built up by proper remedies, nourishment, pure air, and good care. Give the patient a good place in a well-ventilated stable without any draught of air which will reach him, with a good, clean bed of straw; and, if the weather is cold, be particular to blanket well. Give bran mashes, instead of solid food, for two or three days, or until some improvement is manifest; and instead of giving cold water to drink, give a plenty of flaxseed gruel, especially if the throat symptoms are severe; or if the flaxseed cannot be obtained, use instead oatmeal gruel, which should be allowed in abundance, if the patient will take it, as he many times will, if placed where he can reach it easily. The discharge from the nose may be encouraged by pouring boiling water onto one or two quarts of bran, ten drops of carbolic acid, a small handful of salt and hops all mixed together, and held under a tunneled-shaped piece of cloth or blanket, which will conduct the steam up to the head. Kendall's Spavin Cure is one of the best applications to the throat that can be made, by applying it two or three times a day, and rubbing it down to the skin gently.

We have given above the general outline of the management of the patient, but the most important part of the treatment is, to give the renovating powders described on page 95. These powders should be given as early as possible, and continued all through the disease until the horse regains its strength. If these powders are kept on hand, and given freely during an epidemic, the disease would be prevented in many cases, and rendered much more mild in those in which it did occur. The reason for this, is that it is the most perfect renovator of the blood known; and while it purifies the blood, it also invigorates and strengthens the patient, thus placing him in the best possible condition to baffle disease. Another great reason why these renovating powders should be used freely, until the patient is fully convalescent, is to prevent the bad effects which many times follow an attack of this disease which is not properly managed, and which many times leaves him ruined for life.

PLEURISY.—This is an inflammation of the membrane covering the lungs and lining the cavity of the chest.

Symptoms.—A chill, fever, an occasional painful and short cough, and careful breathing, and a disinclination to turn short. A peculiar line will usually be seen running from the haunch, round the belly, to the breast-bone. The breath is not so quick and short as in inflammation of the lungs.

Causes.—Broken ribs or wounds, and other causes similar to those producing lung fever.

Treatment.—The treatment should be about the same as for LUNG FEVER. Feed well while the horse is convalescing, and give the renovating powders same as for LUNG FEVER.

Abscess of the Lungs.—This is sometimes the termination of lung fever, and is very much to be dreaded.

Treatment.—Should be the same as for GLANDERS, and the patient should be supported, if necessary, by giving raw eggs, tonics, stimulants, renovating powders, etc.

NASAL GLEET.—This is a chronic discharge from the nostrils, of a whitish, muco-

purulent matter. It is generally caused by neglecting to treat catarrh and colds properly. The horse may look well and feel well, and the general health be quite good.

Treatment.—Give a course of tonic renovating powders, and feed well. Powders like those recommended in the treatment of Horse will do well.

NAVICULAR DISEASE. (See FOOT DISEASES.)

POLL EVIL.—This consists of a formation of pus like an abscess, and is familiar to all horsemen.

Cause.—Disease of the bone or injury to the part.

Treatment.—Open the swelling as soon as it has become a little soft, before the pus has time to burrow down among the bones, and thus prevent the spread of the disease.

Make a large opening so as to allow all the pus to escape, and clean out well, if necessary with a swab, so as to remove all the pus, and do this twice a day as long as any pus remains. Syringe out with a solution of carbolic acid, fifty drops to each pint of soft water.

PROUD FLESH.—A name commonly used to describe an excessive growth of flesh on an ulcer, or excessive granulation. To cure this, sprinkle a little powdered blue vitriol or burnt alum on the surface. Kendall's Spavin Cure is also excellent.

QUITTOR.—A chronic abscess in the hoof, caused by a bruise or prick of the sole, or from the calk of one foot being pressed into the coronet of the other, confined pus from suppuration, corn, etc.

Symptoms.—The horse is very lame on account of the inflammation before suppuration takes place, but is relieved somewhat as soon as the quittor has burst.

Treatment.—This should begin as soon as any lameness is discovered from any of the above named causes, and the inflammation stopped, if possible, before suppuration takes place. Kendall's Spavin Cure, applied freely to any of the injuries which result in quittor, will prevent this termination, if applied in season; but if it is not cut short, then keep clean and apply a solution of carbolic acid one ounce, to water, one quart.

Poultices of flaxseed meal are sometimes very useful.

RHEUMATISM.—In acute rheumatism there is great excitement and fever, with severe pain in the legs and joints. This pain is so severe that the horse hardly dares to move from the place he occupies, on account of the extreme pain which it causes. He has no unnatural heat in the feet, as in founder.

Cause.—Exposure to a draft of cold air when a horse has been heated, thus suddenly checking perspiration.

Treatment.—Place the horse in a good, comfortable stable, as soon as possible after it is discovered that he is afflicted with acute rheumatism, and commence the following treatment: Give the horse about twenty-five drops of the tincture of aconite root, every four hours, until five or six doses have been given.

Cover with a blanket, and give the horse general good care. Give the following powders as soon as the tincture of aconite has been given: Bicarbonate of soda four ounces, sulphur eight ounces, saltpeter powdered four ounces; mix, and divide into eight powders, and give two or three times a day, according to the severity of the case, and repeat if necessary.

Apply Kendall's Spavin Cure to the joints, or to any part which swells or is tender. Give the renovating powders to improve the general condition, as directed on page 95.

Chronic Rheumatism.—This is a frequent cause of lameness, and it is oftentimes quite difficult to decide fully as to the cause of the lameness.

Treatment.—For this form of the disease we recommend the same powders as given above for acute rheumatism, and also the renovating powders, only to be continued a longer time, and to apply the Kendall's Spavin Cure to the afflicted parts. Only a small quantity need be used at a time, but it should be rubbed well down to the skin, and continued for several weeks, if it should be necessary to continue so long. The Kendall's Spavin Cure, used twice a day, is also the *best external remedy* we know of for this disease in man; but it should be used for some time, as the disease, when of long standing, cannot be cured in a few days. It may be applied, a small quantity at a time, and continued for from one to three or four weeks, if necessary.

RING-BONE.—(For position see plate of skeleton.) Ring-bone is the result, usually, of weakness, hereditary predisposition, or of a peculiar formation of the pastern joints which makes them poorly adapted to hard work; and therefore a provisional callus (or bony substance) is thrown out as a provision of nature to strengthen parts which are too weak.

Only slight injuries to such a joint as we have described above will in many cases result in the growth of a ring-bone.

Treatment.—The treatment of ring-bone has been very unsatisfactory in the past and is still attended with much difficulty in some cases, especially those of long-standing and on old horses; yet we feel certain that the following treatment will prove successful in a large share of cases, if persevered in. We find many persons who expect a cure too soon, and condemn the best treatment possible before they have used it long enough for it to have any effect whatever, and therefore we say, if you would treat ring-bone successfully, never stop in a few days, as so serious an affection cannot be removed in so short a time. If it is of recent origin, and the horse is young, we feel confident that nearly all such cases can be cured with a proper use of Kendall's Spavin Cure; but if the case is of long-standing, and on an old horse, the chances of a cure are

lessened, and therefore we find it necessary in many cases to use, with the Spavin Cure, Kendall's Blister, as per direction on the bottle.

In using the Kendall's Spavin Cure, clip the hair over the bunch, and apply from every other day to two or three times a day as seems to work best; rub well with the hand often. In most cases it would be well to apply soft soap, once in four to ten days, to soak up the scab; then clean off and apply Kendall's Spavin Cure again. In some very bad cases, where the Spavin Cure does not seem to remove the bunch and lameness, after using one bottle, it would be best to use our Blister, followed by the application of Kendall's Spavin Cure every day for two or three weeks, when the Blister can be repeated, if necessary.

In using Kendall's Blister, clip the hair over the bunch, and rub in the Blister well for ten minutes or more. Put on some sweet oil or other grease in two days. When the inflammation subsides, wash with castile soap and warm water, and when it is dry apply Kendall's Spavin Cure as directed on bottle. If the case does not yield in two or three weeks, use the Blister again as before, followed by the Spavin Cure in two or three days.

Tie up the horse's head for a few hours after the Blister has been applied. We would say that this Blister works admirably alone in many cases (not only for ring-bone, but also for spavins, curbs, etc.), and is particularly of great value in connection with the Kendall's Spavin Cure for old and bad cases which do not seem to yield to the use of the Spavin Cure alone.

(Where the Kendall's Blister cannot be had of your druggist, send 50 cts. to Dr. B. J. Kendall Co., Enosburgh Falls, Vt., and they will send a box by return mail.)

Give the horse a few weeks' rest after the cure seems to be complete.

RING-BONE.

1. The joint between the pastern bones.
2. The joint between the lower pastern (or small pastern) and the coffin-bone.

SADDLE GALLS are sores produced by the saddle or by any other part of the harness.

Treatment. — The cause should be removed by attending to the saddle or other part of the harness, and adjusting it so as to remove the pressure. Kendall's Spavin Cure is used with excellent success for all such sores by applying a small quantity twice a day. If the Kendall's Spavin Cure cannot be obtained, get at a drug store laudanum two ounces, tannin two drachms, and mix and apply twice a day.

SCRATCHES. — An inflammation of the skin of the heel of a horse, the first appearance of which is usually a dry and scurvy state of the skin of the heel, with redness, heat, and itching. (See GREASE HEEL.)

Treatment. — Wash the affected parts clean with castile soap and warm soft water, and dry, then use glycerine eight ounces, carbolic acid one drachm, mixed and applied twice a day; washing as above, when necessary, to keep the parts clean. One of the best remdies known for scratches is to apply Kendall's Spavin Cure two or three times a day, and if the blood is not in a very bad condition, it is sure to cure in a short time, if the parts are kept properly cleansed. In most cases the blood is not in very good condition, and for all these cases the renovating powders described on page 95 should be given freely to purify the blood. It is always safe to give these powders; and they not only cleanse the blood, but always put a horse in good condition, so he feels well.

SHOULDER LAMENESS. — This is common among young horses when plowing in the furrow, or it may result from a slip sidewise by a horse of any age. Horses in cities are especially liable to this difficulty. The muscles of the shoulder, and sometimes the shoulder-joints, are involved.

Symptoms. — Heat, tenderness, and sometimes swelling of the parts. It is sometimes difficult to ascertain the exact location of the lameness, but by making a thorough examination of all parts and finding no lameness, heat, or tenderness in other parts, it will be quite certain that the difficulty is located in the shoulder, especially if it is found hot and tender. The horse steps shorter with the sound leg than with the lame one, which he drags along. In nearly all diseases of the foot the horse stretches the leg out straight forward, but in shoulder lameness it will be carried out more from the body.

Treatment. — The horse should have entire rest, and the shoulder should have cold water cloths applied to it for two or three days, and changed frequently. As soon as the heat has been reduced, the cold water cloths may be left off, and Kendall's Spavin Cure applied twice a day for a few days, or until the lameness subsides. In some cases Kendall's Blister would work admirably.

In applying the Blister, place it where the friction from the collar will not affect it. Allow the horse a rest of two or three weeks after the cure seems to be complete and the treatment is stopped.

SHOULDER-JOINT LAMENESS. — This difficulty, being located in the joint, is much more serious than the shoulder lameness just described, and it is more difficult to effect a perfect cure of it.

Symptoms. — The animal drags the leg, with the toe on the ground, and throws the leg out in attempting to move it. It is with great difficulty that he can raise his foot.

Treatment. — If the treatment is not put off too long, a cure may reasonably be expected, if the following directions are followed: This disease being similar to a spavin in the hock-joint, should have similar treatment. If the part is very hot, reduce the temperature by cold cloths as recommended for SHOULDER LAMENESS, or perhaps hot fomentations may work well instead of the cold; then apply Kendall's Spavin Cure two or three times a day, as directed for SPAVIN. If, after one bottle of Spavin Cure has been used, the case does not improve as fast as is thought it should, use Kendall's Blister, as recommended for RING-BONE, and follow it with the Spavin Cure as before. (See also TREATMENT OF SPAVIN.)

DRAGGING THE FORWARD FOOT AN INDICATION OF SHOULDER LAMENESS.

Give the horse a good bedding with dry sawdust, or some soft bed for his front feet to stand on, as he will be liable to stamp on the floor with his foot, and in this way you will avoid the concussion to the shoulder.

SIDE BONES. — This is a species of ring-bone. The side cartilages of the joint become ossified, but do not extend around as in ring-bone. The treatment should be the same as for RING-BONE.

SKIN DISEASES. — There are many different varieties of skin diseases, and yet many seem to be produced by the same causes but present different appearances in different horses.

Baldness. — This is produced by faulty digestion sometimes, when small pimples appear in abundance and contain a fluid. In this form turn the horse to grass, or give soft feed and the renovating powders described on page 95.

When caused by blisters, burns, etc., if the true skin has not been destroyed, apply, three or four times a week, the following mixture: glycerine four ounces, tincture of cantharides two ounces; mixed.

Some cases do well by using the following: Iodine one drachm, lard two ounces; mix and rub down to the skin twice a week.

THE MANGE INSECT.

Mange, Itch, etc. — These are contagious diseases, caused by an insect burrowing in the skin.

Symptoms. — The horse rubs himself against anything he can get at. Small pimples are seen about the head and neck and under the mane. The hair falls off and leaves the skin exposed, with red colored points and fissures. The skin becomes dry and bald, and there is great itching.

SYMPTOMS OF MANGE.

Treatment. — Give the horse a good scrubbing, with a coarse brush, and then wash him well with castile soap and water, and dry carefully. As soon as the horse is thoroughly dried, apply an ointment made as follows: sulphur four ounces, lard ten ounces, carbolic acid one-half ounce; mixed.

This disease being contagious, persons should be careful to have everything used about the horse thoroughly cleansed and subjected to great heat, by steaming or boiling, to destroy the insect which is the cause of the disease. It would be well to apply some of the ointment given above to parts of the stall, rubbing-posts, etc.

SORES. — Of the great variety of sores many are what might be termed healthy sores, while others become unhealthy. The former are best treated with tincture of opium two ounces, tannin one drachm; mixed, and applied in small quantities two or three times a day. The unhealthy sore is best treated by cleansing the sore and applying Kendall's Spavin Cure twice a day. In some cases, where there is proud flesh, cauterize the part with nitrate of silver or blue vitriol, and, after a few hours, apply Kendall's Spavin Cure.

Kendall's Spavin Cure has given entire satisfaction whenever used, to our knowledge, for healthy or unhealthy sores on *man* or *beast*. It should be used by applying a small quantity *directly into the sore after it has been cleansed.*

SPAVIN. (*For location see cut of skeleton*). — In nearly all cases of lameness in the hind leg the seat of the disease will be found to be in the hock-joint, although many persons (not having had experience) locate the difficulty in the hip, simply because they cannot detect any swelling of the hock-joint; but in many of the worst cases there is not seen any swelling or enlargement for a long time, and perhaps never.

Bone Spavin is a growth of irregular bony matter from the bones of the joint, and situated on the inside and in front of the joint.

Cause. — The causes of spavins are quite numerous, but usually they are sprains, blows, hard work, and, in fact, any cause exciting inflammation of this part of the joint. Hereditary predisposition in horses is a frequent cause.

BONE SPAVIN.

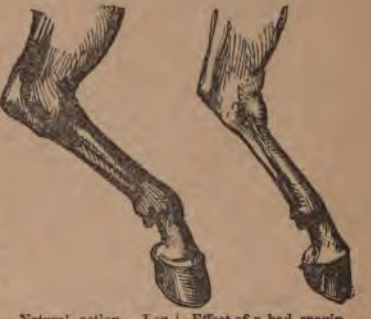
Symptoms. — The symptoms vary in different cases. In some horses the lameness comes on very gradually, while in others it comes on more rapidly. It is usually five to eight weeks before any enlargement appears. There is marked lameness when the horse starts out, but he usually gets over it after driving a short distance, and if allowed to stand for a while, will start lame again.

There is sometimes a reflected action, causing a little difference in the appearance over the hip joint, and if no enlargement has made its appearance, a person not having had experience is very liable to be deceived in regard to the true location of the difficulty. The horse will stand on either leg in resting in the stable, but when he is resting the lame leg he stands on the toe.

If the joint becomes consolidated, the horse will be stiff in the leg, but may not have much pain.

Treatment. — That we may not be misunderstood in regard to what we mean by a *cure*, we would say that we mean to stop the lameness, and in most cases to remove the bunch on such cases as are not past any reasonable hopes of a cure.

But *we do not mean* to be understood that in a case of anchylosis (stiff-joint) we can again restore the joint to its original condition; for this is an impossibility, owing to the union of the two bones making them as one. Neither do we mean that, in any ordinary case of bone spavin which has become completely ossified (that is, the bunch become solid bone), that, in such a case, the enlargement will be removed.



Natural action. Leg brought forward. | Effect of a bad spavin. Leg not brought forward.

In any bony growths, like spavin or ring-bone, it will be exceedingly difficult to determine just when there is a sufficient deposit of phosphate of lime so that it is completely ossified, for the reason that in some cases the lime is deposited faster than in others, and therefore one case may be completely ossified in a few months, while in another it will be as many years.

The cases which are not completely ossified are those that we claim to remove. Some of this class which we have seen removed were large bone spavins of several years' standing, and we think that a large per cent. of cases are not fully ossified for several months or years.

We are well aware that many good horsemen say that it is impossible to cure spavins, and, in fact, this has been the experience of horsemen until the discovery of Kendall's Spavin Cure. It is now known that the treatment which we recommend here will cure nearly every case of bone spavin which is not past any reasonable hopes of a cure, if the directions are followed, and the horse is properly used.

In using Kendall's Spavin Cure apply it two or three times a day, until the lameness has all subsided, and then gradually decrease the quantity used, or only apply it once or twice a day.

If it is necessary to use the horse much, apply only at night. When the enlargement has been removed, the medicine may be left off, and the horse should have several weeks' rest. Although some horses can be put at light work as soon as the cure is complete, yet we would recommend that all be allowed to rest for several weeks.

Some have an erroneous idea, thinking that, in using a bottle of Kendall's Spavin Cure, it makes no difference about the time taken to apply it, and therefore have used the whole of a bottle in two or three days, and, as they see no perceptible change, they discard the medicine before it has had time to take any effect. To such we would say, only a little will be absorbed, and the remainder goes to waste; therefore apply it only over just the size of the spavin, and enough to wet it well, for two or three times, at each application, and rub it well down to the skin each time, with a small swab, or the finger, until it has been absorbed, and repeat this two or three times a day and *continue using the medicine* until the cure is complete, which takes usually from two to eight weeks, or longer, according to the age and condition of the spavin. Much also depends upon how the horse is used.

In some very bad and old cases, if the lameness does not subside after using one bottle of Kendall's Spavin Cure, it would be well to apply Kendall's Blister as directed on box, and follow up with Kendall's Spavin Cure for two or three weeks, and repeat the Blister several times if necessary. The Blister is not, like some we have seen, so powerful as to destroy the skin and other tissues; yet it is very well adapted, when used with Kendall's Spavin Cure, to the treatment of old and bad cases which do not seem to yield with the Spavin Cure alone. (We will send our Blister by mail to any address on receipt of price, 50 cts.)

After a few days' use of Kendall's Spavin Cure, a thick, firm scab is usually formed, which if pulled off will take the hair with it; yet it does not effect the growth of the hair. The better way is to apply soft soap to soften up the scab, and in two or three hours wash well, and when dry apply again as before. (See Testimonials and other information in another part of this book.)

We give no other treatment, as our experience with various other remedies, including blisters, liniments, etc., has been *very unsatisfactory*, as has been the experience of horsemen all over the world; but Kendall's Spavin Cure, when properly used, has given *entire satisfaction*. (*See "Our Experience with Bone Spavin," on page 80 of this book.*)

Occult Spavin.—This is similar to bone spavin in its nature, the difference being that the location is within the joint, so that no enlargement is seen, which makes it more difficult to come to a definite conclusion as to its location, and consequently the horse is oftentimes blistered and tormented in nearly all parts of the leg but in the right place.

BLOOD SPAVIN.

The causes and effects are the same as in bone spavin, and it should be treated in the same way.

These cases are often mistaken for hip disease, because no enlargement can be seen.

Bog Spavin.—The location of this kind of spavin is more in front of the hock-joint than that of bone spavin, and it is a soft and yet firm swelling. It does not generally cause lameness.

Treatment.—Use Kendall's Spavin Cure, as directed for bone spavin; and, if the enlargement is not removed in two to four weeks, apply Kendall's Blister, as directed for bone spavin, and continue the Spavin Cure.

Blood Spavin.—This is similar to bog spavin, but more extended, and generally involves the front, inside and outside of the joint, giving it a rounded appearance. The swelling is soft and fluctuating. Young horses and colts, especially if driven or worked hard, are more liable to have this form of spavin than older horses.

Treatment.—For this form of spavin (especially bad cases) we would recommend our Blister, to be applied every two weeks for a few times, and the Spavin Cure to be used between times of blistering, as recommended on box. Rub well, with the hand, often.

SPLINT.—This is a small, bony enlargement, and generally situated on the inside of the fore-leg about three or four inches below the knee-joint, and occurs frequently in young horses when they are worked too hard.

Treatment should be the same as for bone spavin, which see.

1. A splint near the knee.
2. A low splint.
3. A small bony growth on the front of the leg, also called splint.

SPRAIN.—By this is meant the sudden shifting of a joint farther than is natural, but not so as to produce dislocation. Every joint is liable to sprain by the horse falling, slipping, or being overworked. These cases cause a great deal of trouble, oftentimes producing lameness, pain, swelling, tenderness, and an unusual amount of heat in the part.

Treatment.—Entire rest should be given the horse, and if the part is found hot, as is usually the case, apply cold water cloths, changing frequently, for from one to three days until the heat has subsided, when apply Kendall's Spavin Cure, twice or three times a day, rubbing well with the hand.

If the fever is considerable, it might be well to give fifteen drops of tincture of aconite root, three times a day, for one or two days, while the cold water cloths are being applied. Allow the horse a rest of a few weeks, especially in bad cases, as it is very difficult to cure some of these cases, unless the horse is allowed to rest.

SPRUNG KNEES.—There exists considerable difference of opinion in regard to the cause of this defect. Investigations show a permanent shortening of the ligaments at the hinder part of the knee.

Treatment.—The best treatment known to us, and we believe the best that can be adopted is to have the place where the horse stands highest under the hind feet, by placing a good quantity

of bedding for him to stand on back of the fore feet; then have the horse shod with a high heel, or shoes which grow thicker from toe to heel. Apply Kendall's Spavin Cure over the ligaments at the hinder part of the knee-joint, extending to each side as far as the ligaments are felt, and apply it from above the joint down one-third the distance to the fetlock; also apply it in front of the joint when there is any thickening or any unnatural enlargement there. The Spavin Cure is also one of the best remedies known for cockled ankles, and should be applied in front and around the joint at night; or if the horse is not being worked, it may be used, if preferred, two or three times a day.

STAGGERS. — A disease of horses, resulting from some lesion of the brain, which causes a loss of control of voluntary motion. As it generally occurs in fat horses which are well fed, those subject to these attacks should not be over-fed. The cause is an undue amount of blood flowing to the brain.

Treatment. — The aim of the treatment should be to remove the cause. In ordinary cases give half a pound of epsom salts, and repeat if necessary to have it physic, and be careful about over-feeding.

In mad staggers, it would be well to bleed from the neck in addition to giving the epsom salts.

STIFLE-JOINT LAMENESS. — This is not of very common occurrence, but occurs occasionally in colts kept on uneven ground, which induces dislocation of the stifle, or patella, which slips off from the rounded heads of the bones when the horse steps.

It sometimes occurs in horses which are kept on bad food, or in those which are constitutionally weak.

Symptoms. — The horse stops suddenly and extends one of the hind legs backwards. The pastern is flexed and the head raised, as shown in the engraving, and there is a swelling upon the outer side of the stifle-joint, with great pain. It sometimes occurs in colts on the slightest cause.

PATELLA, OR WHIRLBONE DISPLACED.

Treatment. — Any flurry may restore the bone to its proper place in colts, but for cases which do not become replaced, in colts or horses, get into a shed and fix a rope to the pastern as shown in the engraving, and throw the other end over a beam. Then while one person pulls the leg upward and forward, another should stand by the quarters and push the dislocated patella inward with both hands. Feed well, and give the horse five or six weeks' rest, or place him in a level pasture, and have him shod with a piece of iron projecting from the toe, especially if the toe has been worn off.

Apply Kendall's Spavin Cure over the stifle, as directed for spavin, to remove the soreness and pain.

THE MANNER OF REPLACING THE PATELLA.

SWEENEY (*Atrophy*). — This is a wasting away of the muscles of the shoulder, and is said to be caused by some disease in the foot or leg.

Treatment. — Treat any disease found in the foot or leg as directed in other parts of this book. Apply to the shoulder soft soap with a little salt added, four or five times a week, and rub well.

We have been informed that Kendall's Spavin Cure would cure this disease.

THOROUGHPIN.—An affection accompanying blood spavin, and generally caused by excessive labor.

Symptoms. — A round tumor going through the leg and appearing on the outside and in front of the joint of the hock. Thoroughpin is the same disease as blood spavin, on a more extensive scale, causing the enlargement to extend through the joint from one side to the other.

Treatment. — Same as for BLOOD SPAVIN, which see.

TUMORS are swellings or enlargements of any part of the body. They vary according to their situation and nature.

Treatment.—The treatment varies with different horsemen. And we would say that in some cases it might be best to have them cut out, and yet there are many other cases which can be removed by the use of Kendall's Spavin Cure, applied as directed for spavin. We now have in mind a case of a *bony tumor* which had been sawed off by a surgeon, but, from some cause, continued to grow; after it had again reached quite a large size, the owner of the horse began to use Kendall's Spavin Cure, and, after he had used one or two bottles, told us that the tumor was nearly removed, and on examination we found it quite difficult to detect it.

WATER FARCY is the result of weakness in the old, and of inflammatory action in the young. By long continued labor, from twelve to eighteen hours each day, the horse, already debilitated, is by abuse made a fit subject for water farcy.

THE DRIVER'S FIRST VISIT ON MONDAY MORNING.

It is the custom of some to feed largely, on Saturday night, and not to visit again until Monday morning, when they are liable to find the animal, so cruelly treated, with one swollen leg. The horse holds the leg up as seen in the engraving, and will generally be lame. He is in too much pain, and is too tired to eat, but will be very thirsty on account of the agonies which his cruel treatment has brought upon him. When water farcy occurs, let it be understood that it is because the horse has been worked too long and too hardly, and that if the animal is not better cared for, *Farcy* will be the result.

Treatment.—Let the work be lighter, the nourishment sufficient and of better quality, and the stable kept clean and well ventilated. Lead the horse out two or three times a day for gentle exercise. As soon as the limb will bear friction, let it be *well rubbed with the hands*, and this repeated often. Bathe with cold water and rub dry. If the lameness and swelling continue, take two parts of alcohol, and one of Kendall's Spavin Cure; mix, and bathe the leg with the mixture and rub well. Then take iodide of potassium one drachm, pulverized gentian one drachm, pulverized ginger one drachm, sulphate of iron one drachm, linseed meal two ounces; make into a ball, and give at one dose, repeating every day for several days.

Prepare the above balls as they are wanted each day, because the iodide of potassium should be kept in a vial until it is wanted for use. Always begin the treatment as soon as possible.

Give the renovating powders, described on page 95, for two or three weeks, or until the system has been thoroughly renovated.

WIND GALLS.—Soft swellings or enlargements just above the fetlock joints, which are caused by over-exertion or by sprains. They are of a similar nature to blood spavin, and may be treated in the same way; or place exactly on the wind galls pieces of cork covered with cloth large enough to press them down, and wet with Kendall's Spavin Cure, and keep the corks pressed on the galls by the use of a rubber bandage, only removing it when the horse is used and when it is necessary to wet the compress.

Apply only a little of Kendall's Spavin Cure to the compress, and be careful not to have it so tight as to cause strangulation of the leg, but only as tight as can be without causing strangulation. Remove the compress as soon as there are any signs of soreness, and bathe, once or twice a day, with the Kendall's Spavin Cure, until all soreness has subsided. Care should be exercised in the use of the compress, or sores may be produced. (See directions for the treatment of BLOOD SPAVIN.)

The horse rubs his nose violently against a wall when there is irritation from worms.

WORMS.—There are several kinds of worms which infest the horse, some of which produce a vast amount of mischief.

Tenia (*Tape Worm.*)—These trouble the young mostly, and are usually caused by starving the mare when with foal, and by breeding from old animals. The dam and sire should be in perfect health if a valuable colt is desired. Gentle work is always better for the mare than to remain without work.

Symptoms.—When tape-worm is present, there is checked development, large head, long legs, ravenous appetite, unhealthy coat, thin body, fetid breath. The colt picks and bites its own hair, rubs its nose against a wall, or strains it violently upwards.

Treatment. — Give spirits of turpentine. For a colt three months old, give from one-fourth to one-half ounce; six months old, one-half to one ounce; one year, one to one and one-half ounces; two years, one and one-half to two ounces; four years, three to four ounces. Also procure one pound of quassia chips, and pour three quarts of boiling water on them; then mix a proportional dose of the quassia infusion with the turpentine, and cause it to blend together by stirring in well with yolks of eggs. Add twenty grains of powdered camphor gum, and give the dose the first thing in the morning.

Feed well afterward, and give every morning until the coat is glossy, muriated tincture of iron, from one to ten drachms, according to age, and also Fowler's solution, from one-fourth to three drachms.

Give the renovating powders, described on page 95, freely, until in good condition.

Lumbrici. — Long, round worms, which are sometimes seen eighteen inches long. They prey upon the weakly whether old or young.

Treatment. — Give one drachm tartar emetic, worked into a ball with linseed meal and flour, every morning, until the desired effect is accomplished. Or give calomel three drachms, tartar emetic one drachm; mixed, and made into three balls, to be given at night for three nights; and give, one day after the last ball, a good purging ball, or one and one-half pints of raw linseed oil, to act as physic; then give the renovating powders, which are described on page 95; or these powders alone, when given freely or in sufficient quantities to loosen the bowels, and then in the ordinary dose for some time, work nicely.

Pin Worms. — This variety of worms inhabits the rectum, and causes great itching posteriorly, which causes the horse to rub its hair off against the wall.

Treatment. — Most medicines are deprived of their activity because they do not reach the rectum; therefore it is best to treat with injections which will come directly in contact with the parasites. Take one ounce catechu and a quart of water, and when dissolved, give as an injection, and repeat for seven mornings. On the eighth day give a mash; at night follow with one-half ounce aloes, and one drachm calomel. Repeat the above if necessary. Injections of tobacco smoke work well. The renovating powders, referred to on page 95, should be given freely after the above treatment.

YELLOW WATERS. — This affection is the result of liver disease, and has derived its name from the characteristic color of the membranes of the eyes, nose, and mouth, which have a peculiar yellowness that is caused by the liver being diseased, so that its natural functions are not properly performed, and a large amount of bile is thrown back into the blood, instead of being carried off in its natural way, and only eliminated partially through the kidneys. It occurs more often in horses which are highly fed and have nothing to do, than in any others.

Treatment. — Give ginger two drachms, powdered mandrake root one drachm, powdered aloes four drachms; mix, and give at one dose. Feed the horse with soft feed and grass to loosen the bowels. Repeat the above dose as often as shall be necessary, which in most cases, perhaps, would be about every other day. Give also, two or three times a day, the renovating powders described on page 95, and continue their use until improvement is noticed.

DOSES FOR THE HORSE.

Name of Drug.	Action and Use.	Dose.	Antidots.
Aloes.	Laxative and Tonic.	½ to 1 oz.	
Alum.	Astringent.	2 to 3 drs.	
Anise Seed.	Aromatic and Stomachic.	½ to 2 ozs.	
Aqua Ammonia.	Stimulant and Antacid.	1 to 4 drs.	Vinegar.
Arsenic.	Alterative and Tonic. Used for Paralysis, Mange, etc.	1 to 5 grs.	Magnesia and oil.
Assafœtida.	Anti-spasmodic, Coughs, etc.	1 to 3 drs.	
Bicarbonate of Potash.	Diuretic and Antacid. Good for Rheumatism.	3 to 5 drs.	Vinegar and raw Linseed Oil.
Bismuth.	For Chronic Diarrhœa, etc.	½ to 1 oz.	
Black Antimony.	Promotes the Secretions.	¼ to ½ dr.	Infusion of oak bark. Give also lins'd oil.
Blue Vitriol.	Astringent and Tonic.	½ to 1 dr.	Eggs, Milk, etc.
Calomel.	Cathartic.	10 to 40 grs.	Eggs and Milk.
Camphor.	Anti-spasmodic.	½ to 1 dr.	
Cantharides.	Diuretic and Stimulant.	3 to 6 grs.	
Carbolic Acid.	Externally and Disinfectant.		Eggs; soap; gruel.
Castor Oil.	Cathartic.	½ to 1 pt.	
Cayenne.	Stimulant and Carminative.	5 to 25 grs.	

Name of Drug.	Action and Use.	Dose.	Antidote.
Chlorate of Potash.	Diuretic. Given for Bloating, etc.	½ to 2 drs.	
Copperas.	Tonic and Astringent.	½ to 1½ drs.	
Croton Oil.	Powerful Purgative.	10 to 15 drops.	Opium.
Digitalis leaf.	Sedative and Diuretic.	10 to 20 grs.	Stimulate.
Epsom Salts.	Cathartic and Febrifuge.	2 to 8 ozs.	
Ether.	Anti-spasmodic.	½ to 2 ozs.	
Fowler's Solution.	Used for Skin Diseases. See Arsenic, a preparation of.	1 to 4 drs.	Hydrated Peroxide of Iron.
Gentian Root.	Tonic.	1 to 2 drs.	
Ginger.	Tonic, Stimulant, and Stomachic. Used for Flatulent Colic, Dyspepsia, etc.	2 to 5 drs.	
Glauber's Salts.	Cathartic.	6 to 12 ozs.	
Iodide of Potassium.	Diuretic and Alterative. Used for Rheumatism, Dropsy, Enlarged Glands, etc.	½ to 1½ drs.	Give freely, starch or flour, with water largely.
Linseed Oil, Raw.	Cathartic and Nutritive.	1 to 2 pts.	
Magnesia.	For colts as an Antacid and Laxative.	¼ to 1 oz.	
Mercurial Ointment.	Used for Mange, Itch, Lice, and other Parasites.		Whites of eggs with milk given freely.
Nux Vomica.	Nervous stimulant. Used for Paralysis.	15 to 25 grs.	Saleratus, followed quickly by copperas, both dissolved in water.
Opium.	Anodyne and Anti-spasmodic. Given in Colic, Inflammation of Bowels, Diarrhœa, etc.	¼ to 1 dr.	Belladonna, str'g coffee, brandy, and ammonia. Dash cold water on, and keep the horse moving.
Prepared Chalk.	Antacid.	½ to 1 oz.	
Quinine.	Tonic. Given during Convalescence.	15 to 50 grs.	
Saltpetre.	Diuretic and Febrifuge.	1 to 3 drs.	Linseed oil largely, raw.
Soda Bicarb.	Similar to Bicarb. Potash.	3 to 8 drs.	
Soda Sulphite.	Antiseptic and Alterative. Used for Blood Diseases.	½ to 1 oz.	
Solution of Lime.	Antacid, used as an Antidote to poisoning by Acids.	4 to 6 ozs.	
Spirits of Chloroform.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	
Strychnia.	Tonic and Stimulant. Used for Paralysis.	½ to 1 gr.	Tobacco.
Sulphur.	Alterative and Laxative. Used for Skin Diseases and Rheumatism.	½ to 2 ozs.	
Sweet Spirits of Nitre.	Diuretic and Diaphoretic.	½ to 1½ oz.	
Tannic Acid.	Astringent.	20 to 40 grs.	
Tartar Emetic.	Sedative and Alterative.	⅛ to ½ dr.	Tannic Acid.
Tincture of Aconite Root.	Sedative. Used for Lung Fever, etc.	15 to 35 drops.	Give small doses of Nux Vomica, and stimulants largely, and keep moving.
Tincture of Cantharides.	Stimulant and Tonic.	1 to 2 drs.	
Tincture Ergot.	Parturient.	1 to 2 ozs.	
Tincture Iodine.	Used Externally.		
Tincture Iron.	Tonic and Astringent. Used for Typhoid Diseases.	½ to 1 oz.	
Tr. Nux Vomica.	Tonic. Stimulant in Paralysis and Dyspepsia.	2 to 4 drs.	See Nux Vomica.
Tincture Opium.	Anodyne and Anti-spasmodic.	1 to 2 ozs.	See Opium.
White Vitriol.	Astringent. Used for Cuts, Wounds, and Sores, in Solution.	5 to 15 grs.	Milk, eggs, and flour.

For a colt one month old, give one twenty-fourth of the full dose for an adult horse as given above; three months old, one-twelfth; six months old, one-sixth; one year old, one-third; two years old, one-half; three years old, three-fourths.

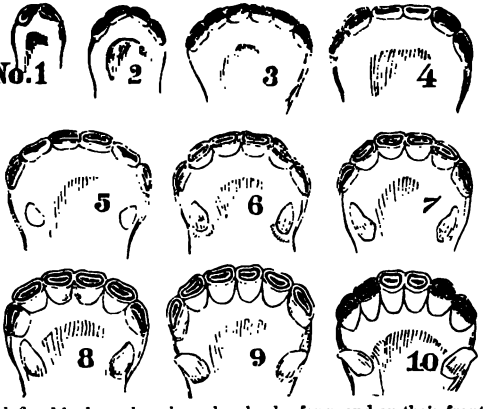
IN MEASURING LIQUIDS.

A tablespoonful is equal to half an ounce by measure.
A desertspoonful is equal to one-fourth ounce, or two drachms.
A teaspoonful is equal to one drachm.
A teacup is estimated to contain about four fluid ounces, or a gill.
A wineglass about two fluid ounces.

The above named household implements vary in size and capacity, so that usually it is difficult to measure with them accurately; yet, for nearly all medicines, it will be near enough for all practical purposes, excepting some teacups are now made to hold six or eight ounces, so that, if the medicine to be measured is poison, it is well to give smaller doses if the exact capacity is not known. It is best for those having much use for measures to procure a glass graduate which will measure drachms and ounces.

THE AGE OF THE HORSE.

Determined by the Appearance of the Teeth.



The safest way of determining the age of a horse is by the appearance of the teeth, which undergo certain changes in the course of years. Although it may be impossible to give any rules which will be found to be exactly correct *in every case*, yet the following classification is generally correct; but exceptions will occur, as, for instance, a noble horse may be taken for younger than he really is, because the strong structure of all the bones makes the teeth also stronger than those of a horse of the same age, of an inferior breed.

Eight to fourteen days after birth, the first middle nippers of the set of milk teeth are cut (Fig. 1); four to six weeks afterwards, the pair next to them (Fig. 2); and finally, after six or eight months, the last (Fig. 3).

All these milk teeth have a well-defined body and neck, and a slender fang, and on their front surfaces grooves or furrows, which disappear from the middle nippers at the end of one year; from the next pair in two years; and from the incisive teeth (cutters) in three years.

At the age of two the nippers become loose and fall out; in their places appear two permanent teeth, with deep, black cavities, and full, sharp edges (Fig. 4).

At the age of three, the next pair (Fig. 5) fall out.

At four years old, the corner teeth fall out (Fig. 6).

At five years old, the horse has his permanent set of teeth.

The teeth grow in length as the horse advances in years, but at the same time, his teeth are worn away by use about one-twelfth of an inch every year; so that the black cavities of the centre nippers below disappear in the sixth year (Fig. 7); those of the next pair, in the seventh year (Fig. 8); and those of the corner teeth, in the eighth year (Fig. 9). Also the outer corner teeth of upper and lower jaw just meet at eight years of age.

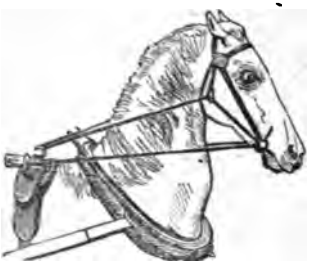
At nine years old, cups leave the two centre nippers above, and each of the two upper corner teeth has a little sharp protrusion at the extreme outer corners (Fig. 10).

At the age of ten, the cups disappear from the adjoining teeth.

At the age of eleven, the cups disappear from the corner teeth above, and are only indicated by brownish spots.

The oval form becomes broader, and changes, from the twelfth to the sixteenth year, more and more into a triangular form, and the teeth lose, finally, with the twentieth year, all regularity. There is nothing remaining in the teeth that can afterwards clearly show the age of the horse, or justify the most experienced examiner in giving a positive opinion.

The tushes, or canine teeth, conical in shape, with a sharp point, and curved, are cut between the third and fourth year; their points become more and more rounded, until the ninth year, and after that, more and more dull in the course of years, and lose, finally, all regular shape. Mares frequently, no tusks, or only very faintly indicated.



A VERY FOOLISH MANNER OF TORTURING HORSES.

A BETTER AND MORE HUMANE WAY OF TREATING OUR FAITHFUL FRIEND.

FAVORITE RECEIPTS FOR THE HORSE.

ALTERATIVE AND LAXATIVE BALLS. No. 1. — Linseed meal one ounce, aloes one-half ounce, castile soap one-half ounce. Mix.

No. 2. — Ginger one drachm, castile soap two drachms, Barbadoes aloes (pulverized) six drachms, flaxseed meal one ounce. Mix.

ANODYNE DRENCHES. No. 1. — Tincture of opium one ounce, starch gruel one quart. Mix.

No. 2. — Sweet spirits of nitre one ounce, tincture of opium one ounce, essence of peppermint, one-fourth ounce, water one pint. Mix.

No 3. — Tincture of opium one ounce, spirits of camphor one-half ounce, anise one-half ounce, sulphuric ether one ounce, water one pint. Mix.

ASTRINGENT AND CORDIAL. No. 1. — Opium twelve grains, camphor one-half drachm, catechu one drachm. Mix.

No. 2. — Opium ten grains, camphor one drachm, ginger two drachms, castile soap two drachms, anise three drachms, liquorice two drachms. Mix.

BOTS. — Take new milk two quarts, syrup one quart. Mix, and give the whole, and, in fifteen or twenty minutes after, give two quarts of warm, strong, sage tea; half an hour after the tea, give one quart of raw linseed oil, or, if the oil cannot be had, give lard instead.

BRITTLE AND CONTRACTED HOOFS. — Take of castor oil, Barbadoes tar, and soft soap, equal parts of each; melt all together and stir while cooling, and apply a little to the hoof three or four times a week.

BRUISES, CUTS, ETC., ON HORSE OR MAN. — Tincture arnica one ounce, sassafras oil one-half ounce, laudanum one ounce. Mix. Shake well before using. Bandage lightly, and keep wet with the mixture.

The best treatment in use, for nearly all of these cases, is to apply Kendall's Spavin Cure.

COLIC. No. 1. — Take of gum myrrh one ounce, gum camphor one ounce, powdered gum guaiac one ounce, cayenne one ounce, sassafras bark (powdered) one ounce, spirits turpentine one ounce, oil origanum one-fourth ounce, oil hemlock one-half ounce, pulverized opium one-half ounce, strongest alcohol two quarts. Mix all together, shake often for eight or ten days, and filter or strain through flannel. Dose, from one to three tablespoonfuls, according to the severity of the case; give in a pint of milk.

We never have known the above remedy to fail of giving relief when given for colic, in horses. In many cases where it has been used it has given immediate relief, even though various other remedies had failed of giving any relief.

It makes one of the very best of Pain Killers for family use, and we advise all to keep it on hand.

No. 2. — Sulphuric ether one and one-half ounces, laudanum one ounce, essence of peppermint two ounces, water sixteen ounces. Mix, and shake well before giving.

No. 3. — Take of laudanum one ounce, spirits of turpentine one and one-half ounces. Mix, and give at one dose, in three times the amount of warm water.

CONDITION POWDERS. No. 1. — Gentian, fenugreek, sulphur, saltpetre, cream of tartar, of each two ounces; resin, black antimony, of each one ounce; ginger, liquorice, three ounces each; cayenne one ounce, pulverized and mixed thoroughly. Dose, one tablespoonful, once or twice a day, mixed with the food. Used with good success for coughs, colds, distemper, hide-bound, and nearly all diseases for which condition powders are given.

No. 2. — Fenugreek four ounces, ginger six ounces, anise (pulverized) four ounces, gentian two ounces, black antimony two ounces, hard wood ashes four ounces. Mix all together. Excellent to give a horse an appetite. Dose, one tablespoonful.

No. 3. — Liquorice four ounces, fenugreek four ounces, elecampane four ounces, blood root one ounce, tartar emetic one-half ounce, ginger and cayenne, each one ounce. Mix, and give a tablespoonful two or three times a day in the feed. One of the best condition powders for any cough, cold, distemper or epizootic; also excellent for heaves. For heaves, one ounce of lobelia and camphor may be added. See Renovating Powders on page 95.

CORDIAL BALLS. No. 1. — Anise (powdered) one-half ounce, ginger one drachm, gentian one drachm, fenugreek two drachms. Mix.

No. 2. — Caraway and ginger each two drachms, anise, gentian, and fenugreek each one ounce. Mix.

No. 3. — Camphor one drachm, anise three drachms, tincture of opium one ounce, powdered extract of liquorice three drachms, flaxseed meal one ounce. Mix.

CONTRACTED HOOF OR SORE FEET. No. 1. — Take equal parts of soft fat, yellow wax, linseed oil, Venice turpentine and Norway tar; first melt the wax, then add the others, mixing thoroughly. Apply to the edge of the hair once a day.

No. 2. — Benzine one ounce, salts of nitre one ounce, alcohol three ounces, aqua ammonia two ounces, Venice turpentine eight ounces. Mix. Apply to the edge of the hair and all over the hoof once a day for ten days, then twice a week for a short time.

No. 3. — Resin four ounces, lard eight ounces; heat them over a slow fire, then take off and add powdered verdigris one ounce, and stir well to prevent its running over; when partly cool add two ounces spirits of turpentine. Apply to the hoof about one inch down from the hair.

COUGH MIXTURES. No. 1. — Oil of tar, given as directed for treatment of HEAVES, is one of the best remedies for nearly all coughs.

No. 2. — Take of alcohol one-half pint, balsam of fir two ounces. Mix well, and add all the tar it will out. Shake well before using. Dose, from one to two teaspoonfuls two or three times a day. See Renovating Powders on page 95.

CRACKED HEELS. — Tar eight ounces, beeswax one ounce, resin one ounce, alum one ounce, tallow one ounce, sulphate of iron one ounce, carbolic acid one drachm. Mix, and boil over a slow fire. Skim off the filth, and add two ounces of the scrapings of sweet elder.

CUTS, WOUNDS, AND SORES. No. 1. — Take of lard four ounces, beeswax four ounces, resin two ounces, carbolic acid one-fourth ounce. Mix the first three, and melt; then add the carbolic acid, stirring until cool. This is excellent for man as well as beast.

No. 2. — Tincture aloes one ounce, tincture myrrh one-half ounce, tincture opium one-half ounce, water four ounces. Mix, and apply night and morning.

No. 3. — Tincture opium two ounces, tannin one-fourth ounce. Mix.

No. 4. — Carbolic acid one ounce, soft water one quart. Mix.

DIABETES. — Sugar of lead ten grains, alum thirty grains, catechu one drachm; tincture of opium one-half ounce, water one pint. Mix.

DISTEMPER. — Hops two ounces, carbolic acid thirty drops, boiling water two gallons. Mix the hops and carbolic acid with the boiling water, and compel the animal to inhale the steam for fifteen or twenty minutes at a time; repeat three times a day. Apply a strong mustard paste to the throat, and place a warm poultice over the paste. Feed warm mashes and boiled vegetables; keep the stable comfortably warm and the air pure. Give the following powders once a day: Powdered Peruvian bark two ounces, powdered gentian one ounce, powdered copperas one ounce. Mix, and divide into eight powders.

DIURETICS. — Take of balsam copaiba two ounces, sweet spirits of nitre three ounces, spirits of turpentine two ounces, oil of juniper two ounces, tincture of camphor two ounces. Mix; shake the bottle before pouring the medicine. Dose for adult horse: Two tablespoonfuls in a pint of milk, repeated every four to six hours, if necessary. This is a reliable preparation for kidney difficulties.

DIURETIC BALLS. No. 1. — Saltpetre three drachms, resin four drachms, castile soap two drachms, fenugreek three drachms, flaxseed meal one ounce. Mix, and form into a ball.

No. 2. — Oil of juniper one-half drachm, resin and saltpetre each two drachms, camphor one-half drachm, castile soap one ounce, flaxseed meal one ounce. Mix, and form into a ball.

DIURETIC AND TONIC BALLS. — Copperas one and one-half drachms, ginger one drachm, gentian one drachm, saltpetre three drachms, resin one-half ounce, flaxseed meal one ounce. Mix, and form into a ball.

EYE WATER. No. 1. — White vitriol and pure saltpetre of each one scrupie, pure soft water eight ounces. Mix. This should be applied to the inflamed lids three or four times a day, and if the inflammation does not lessen in one or two days, it may be injected directly into the eye.

The writer has used this for his own eyes, reduced half with water, and dropped directly into the eye, which would cause the eye to smart considerably for about five minutes, when he would bathe the eye with cold water for a few minutes, and, by repeating this three or four times a day, it has given the very best of satisfaction.

It does nicely, many times, to just close the eye and bathe the outside freely.

No. 2. — Sugar of lead one drachm, tincture of opium two drachms, soft water one pint. Mix, and wash the eye two or three times a day.

FARCY. — Nitrate of potash four ounces, black antimony two ounces, sulphite of soda one ounce; elecampane two ounces. Mix. Dose, one tablespoonful once or twice a day.

FARCY AND GLANDERS. No. 1. — Iodide of potassium one and one-fourth drachms; copperas one-half drachm; ginger one drachm, gentian two drachms, powdered gum arabic and syrup to form a ball.

No. 2. — Calomel one-half drachm, turpentine one-half ounce, blue vitriol one drachm, gum arabic and syrup to form a ball.

No. 3. — One-half ounce sulphite of soda, five grains Spanish flies, powdered. Mix, and give at night in cut feed for several weeks; give at the same time, every morning and noon, three drachms powdered gentian, two drachms powdered blue vitriol; give the medicines for a long time; feed well. This is the best treatment that can be given for this disease.

FLESH WOUNDS. — To prevent inflammation or tendency to sloughing or mortification, take one pound saltpetre, two gallons water, three pints proof spirits; mix, and inject into the wound with a syringe three times a day until it heals. In treating deep wounds or those of a dangerous character, especially if the animal is inclined to be fat, give a dose of physic, feed bran, carrots, etc. No grain should be fed, and grass is more desirable than hay. If grass is fed freely, physic is not necessary.

Kendall's Spavin Cure is one of the best medicines known for flesh wounds.

FEVER BALLS. No. 1. — Saltpetre two and one-half drachms, tartar emetic one-half drachm, flaxseed meal one ounce, camphor one-half drachm, ginger two drachms. Mix, and form into a ball. Repeat three or four times a day if necessary.

No. 2. — Tincture aconite ten drops, tartar emetic one-fourth drachm, saltpetre one drachm, ginger two drachms, linseed meal one ounce. Mix, and form into a ball. Repeat three or four times a day if necessary.

FOUNDER. No. 1. — Vinegar three pints, cayenne pepper one-half drachm, tincture of aconite root fifteen drops. Mix, and boil down to one quart; when cool, give it as a drench. Blanket the horse well; after the horse has perspired for an hour or more, give one quart of raw linseed oil. This treatment will be found good for horses foundered by eating too much grain.

No. 2. — Some recommend for horses foundered on grain, to bleed about one gallon, then to drench the horse with one quart of raw linseed oil; after this to rub the fore legs well, and for a long time, with very warm water, having a little tincture of opium mixed with it. As the horse will not recover from loss of blood for a long time, it is usually better to adopt the treatment given in No. 1. See treatment of FOUNDER.

GREASE HEEL. — Chloride of zinc one and one-half drachms, water ten ounces, glycerine eight ounces. Mix. If there is much discharge, apply a poultice for several hours, followed by application of the above, after cleansing well with soft water and castile soap. The following powders should be given at the same time in the feed, every night, for a week or two: Bicarbonate of soda one ounce, arsenic one drachm, iodide of iron one-half ounce, fenugreek two ounces, ginger two ounces, elecampane one ounce. Mix thoroughly, and divide into twelve powders.

HEALING MIXTURE. No. 1. — Cosmoline five ounces, carbolic acid one drachm. Mix. This is one of the very best of mixtures for any sore, especially for such cases as are inclined not to heal readily.

No. 2. — Kendall's Spavin Cure is an excellent healing mixture for nearly all sores and flesh wounds.

No. 3. — Carbolic acid one ounce, soft water two pints. Mix.

No. 4. — White vitriol one ounce, soft water two pints. Mix.

No. 5. — Pulverized camphor one drachm, prepared chalk six drachms, burnt alum four drachms. Mix. Sprinkle over the sore.

No. 6. — Tincture of opium one ounce, tannin one drachm. Mix, and shake well before using. Excellent for galls of collar, saddle, or in fact for any purpose requiring a healing astringent.

HEAVES. No. 1. — (See Treatment of HEAVES.) One teaspoonful of lobelia, given in the feed once a day for a week, and then once or twice a week, will stop them for a time.

No. 2. — Balsam copaiba one ounce, spirits of turpentine two ounces, balsam fir one ounce, cider vinegar sixteen ounces. Mix, and give a tablespoonful once a day.

No. 3.—Saltpetre one ounce, indigo one-half ounce, rain water four pints. Mix, and give a pint twice a day.

No. 4.—Liquorice, elecampane, wild turnip, fenugreek, skunk-cabbage, lobelia, cayenne and ginger, equal parts of each. Mix, and give a tablespoonful once or twice a day; if the horse refuses to eat it in feed, make it into a ball and give.

No. 5.—The renovating powders described on page 95 are the best treatment known for many cases if fed freely for some time.

HORSE LINIMENTS. No. 1.—Oil spike, oil origanum, oil hemlock, oil wormwood, aqua ammonia, camphor gum, of each two ounces, olive oil four ounces, alcohol one quart. Mix. This is an excellent liniment for man or beast.

No. 2.—Oil origanum, oil amber, sweet oil, of each one ounce, oil spike, aqua ammonia and oil of turpentine, of each two ounces. Mix.

No. 3.—Linseed oil eight ounces, turpentine eight ounces, oil origanum four ounces. Mix well. This is excellent for sprains and bruises, and is good as a general liniment.

No. 4.—Oil spike one ounce, oil origanum two ounces, alcohol sixteen ounces. Good for lameness resulting from almost any cause.

No. 5.—Take equal parts of alcohol, chloroform, aqua ammonia, Jamaica rum and water, and mix.

No. 6.—Kendall's Spavin Cure is the best liniment known to the profession for any purpose for which any of the above liniments are used, and if we were to give the receipt here from which it is made, it would cost at nearly every drug store in the land more to have it put up, strictly according to our formula, than it now costs the consumer. The reason why we can do this is because we buy all the very costly drugs used in making it in immensely large quantities of first producers, so that we are enabled to get genuine pure drugs at a much lower price than any dealer, so that we can save one profit and give our patrons a purer and better article than can be had at any ordinary store, and do it for a smaller price.

MANGE.—Oil tar one ounce, lac sulphur one and one-half ounces, whale oil two ounces. Mix. Rub a little on the skin wherever the disease appears, and continue daily for a week, and then wash off with castile soap and warm water.

NASAL GLEET. No. 1.—Copperas two ounces, pulverized gentian, three ounces, elecampane one ounce, linseed meal three ounces; mix, and give from one-half to one tablespoonful twice a day.

No. 2.—Aloes six ounces, pulverized nux vomica three drachms, flaxseed meal four ounces; make into eight powders, and give one or two each day.

OINTMENT FOR HORSES.—Bees-wax two ounces, rosin three ounces, lard four ounces, carbolic acid one drachm, honey one-half ounce; melt all together and bring slowly to a boil, then remove from the fire, and add slowly one gill of spirits of turpentine, stirring all the time until cool; used with good success for galls, cracked heels, flesh wounds or bruises.

POLL EVIL AND FISTULA. No. 1.—Copperas one drachm, blue vitriol two drachms, common salt two drachms, white vitriol one drachm; mix, and powder fine. Fill a goose-quill with the powder, and push it to the bottom of the pipe, having a stick in the top of the quill, so that you can push the powder out of the quill, leaving it at the bottom of the pipe; repeat again in about four days, and in two or three days from that time you can take hold of the pipe and remove it without trouble.

No. 2.—Tincture of opium one drachm, potash two drachms, water one ounce; mix, and when dissolved inject into the pipes with a small syringe, having cleansed the sore with soap-suds; repeat every two days until the pipes are completely destroyed.

No. 3.—Take a small piece of lunar caustic, place in the pipe, after being cleansed with soap-suds, then fill the hole with sweet oil.

No. 4.—Fill the sore to the bottom with ashes from burnt corn-cobs; repeat two or three times, if necessary, or until a cure is effected.

QUARTER CRACK.—The best way to cure quarter crack is to open the heel on that side between bar and frog, cutting down pretty well, (not sufficient to cause bleeding,) until the quarter will give freely; then put on a shoe that will expand the heel. It is also necessary in this case that the inner heel should be opened or spread, as the hoof is simply too small for the foot; if this is properly done the point is directly reached. Some recommend in addition to this, burning with a hot iron a crease across at the upper edge of hoof. If this is done properly the hoof will not split any more. The hoof may now be more rapidly grown if desired. Opening the foot and the shoe is the point of success.

QUITTOR.—Corrosive sublimate one-quarter ounce, muriatic acid twenty drops, soft water two ounces; mix the two last and shake well, then add the first.

Inject a little with a glass syringe one or two times, being careful to inject to the bottom. Warm poultices, used for several days, generally work well.

RINGWORM.—Apply mercurial ointment three or four times a week.

SADDLE AND HARNESS GALLS, BRUISES, ETC. No. 1.—Tincture of opium two ounces, tannin two drachms; mix, and apply twice a day.

No. 2.—Take white lead and linseed oil, and mix as for paint, and apply two or three times a day; this is good for scratches, or any wounds on a horse.

No. 3.—Kendall's Spavin Cure is one of the best remedies known for galls, bruises, etc.

SCRATCHES AND GREASE HEEL. No. 1.—Balsam fir four ounces, lard four ounces. Stir, with a gentle heat, until thoroughly mixed. Wash the sores well with castile soap, and apply.

No. 2.—Sugar of lead two ounces, borax one ounce, sweet oil six ounces. Mix, and apply twice daily, after washing with castile soap, and drying.

No. 3.—Tincture of myrrh two ounces, glycerine four ounces, tincture of arnica two ounces. Mix thoroughly, and apply two or three times a day, after cleansing as above with castile soap.

No. 4.—Take one-half ounce of powdered verdigris, and one pint of rum or proof spirits. Mix, and apply once or twice a day. This works nicely for grease heel or mud fever.

No. 5.—Take of oxide of zinc one drachm, lard one ounce, powdered gum benzoin ten grains, camphorated spirits one drachm. Mix thoroughly, and rub on twice a week. Do not wash after the first application.

No. 6.—Kendall's Spavin Cure is one of the best remedies known for scratches or grease heel. In using it cleanse the parts well with castile soap and warm water and wipe dry; then apply the Spavin Cure twice a day.

SORE LIPS.—The lips become sore frequently at the angles of the mouth, from bruising with the bit. They can be cured by applying the following mixture:

Tincture of myrrh two ounces, tincture of aloes one ounce, tincture of opium one-half ounce. Mix, and apply three or four times a day.

SORE MOUTH AND LIPS.—Borax one ounce, tannin one-fourth ounce, glycerine eight ounces; mix, and apply two or three times a day with a swab.

SPRAINS, ETC. No. 1.—Hog's lard and spirits of turpentine; mix, and place in the hot sunshine for four or five days. Apply four or five times a week.

No. 2.—No remedy that we ever saw used for sprains, etc., which equals Kendall's Spavin Cure.

SWEENEY. No. 1.—Spanish flies, camphor gum, and cayenne, of each one ounce, alcohol ten ounces, spirits turpentine six ounces, oil origanum two ounces. Mix.

THRUSH. No. 1.—Wash the feet well with castile soap and water, and sprinkle a small quantity of pulverized blue vitriol in the cleft, and then fill up all the cavities with cotton and press it in so as to keep out all dirt, and repeat as often as necessary until the cure is complete.

No. 2.—Blue vitriol and copperas of each one ounce, burnt alum two ounces, white vitriol one-fourth ounce. Mix.

No. 3.—The best remedy we ever knew to be used for this troublesome disease is Kendall's Spavin Cure. It should be applied freely to the diseased surface, after the ragged parts have been cut away and thoroughly cleansed with castile soap and warm water; then apply the Spavin Cure freely, and pack the cavity with cotton-batting so as to keep out all dirt.

TONIC BALL.—Ginger two drachms, gentian one drachm, Peruvian bark one-half ounce, fenugreek one-fourth ounce; mix, and form a ball.

TO GROW HAIR.—Mix sweet oil one pint, sulphur three ounces. Shake well, and rub well into the dock twice a week.

TO KILL LICE ON CATTLE.—Take one ounce carbolic acid, one quart soft soap, one and one-half gallons water. Mix, and apply.

UNHEALTHY ULCERS.—Nitric acid one ounce, blue vitriol three ounces, soft water fifteen ounces.

WATER FARCY. No. 1.—Saltpetre two ounces, copperas two ounces, ginger one ounce, fenugreek two ounces, anise one-half ounce, gentian one ounce. Mix, and divide into eight powders; give two or three each day.

No. 2.—Gentian one ounce, ginger one-half-ounce, anise one ounce, elecampane two ounces; blue vitriol one ounce, flaxseed meal two ounces, saltpetre two ounces. Mix, and divide into eight powders. Moderate daily exercise and rubbing the limbs are useful.

WORMS.—Calomel one drachm, tartar emetic one-half drachm, linseed meal one ounce, fenugreek one ounce. Mix, and give in feed at night, and repeat the dose for two or three times, and follow with one and one-half pints of raw linseed oil, about six hours after the last powder has been given.

TO HORSE OWNERS.

All must admit that we live in an age of improvements; and that we enjoy what our fore-fathers never even dreamed of — in the fast and easy transportation, rapid communication from continent to continent, and the use of the hundreds of labor-saving machines; and yet before, or even when these great discoveries were first made known to the public, how many there were (like Thomas) who doubted: but "time will prove all things," and so it has been with all these inventions which were once said to be impossibilities, for now we know them to be of the great value which their originators claimed for them.

In the year 1875, it was claimed by the publisher of this book, that he had discovered a combination of remedies which would cure bone spavins and remove the enlargement without blistering or causing any sore. Like all other discoveries, this too was scouted at when first announced to the public, as might naturally have been expected, by those who knew most about the usual manner of treating this difficulty, and by those who had tried faithfully everything they could learn of ever being used, but only meeting with disappointment with each trial of the vaunted remedy. This class (being *horsemen*) knew that a bone spavin made an otherwise valuable horse of but little worth, for they knew how frequently the most powerful remedies had been used, such as blisters, which were so powerful as to destroy the tissues, and also the red-hot iron, which was worse, if possible, and still the horse left as bad *or worse* than before anything had been used — therefore after so many disappointments of this kind, it would be very natural for men having such an experience, to say it was impossible to cure a spavin, and remove the bunch, and to do it with a remedy so mild as not to blister. But, as we said before, "time will prove all things," and so it has been with Kendall's Spavin Cure, and those who were the first to condemn it are now the loudest in its praise; (I mean those who were *horsemen*, and who knew that if a cure was to be accomplished, there was something needed more than to simply make a few hasty and perhaps faulty applications, and therefore would use the Spavin Cure with patience according to directions).

The time was, in the practice of medicine, when about every patient was subjected to the rash treatment of bleeding and salivation from the indiscriminate use of calomel, but time has proved these plans of treatment to be more fruitful of damage than otherwise, so they have become among the things of the past. A similar reform is now taking place in the treatment of the horse, the most useful animal ever created; and horsemen are beginning to learn that a horse needs more humane treatment than he has received in the past, and the cases are *very rare* which require the powerful remedies that have been in use; and I think we can safely say that those cases *never occur* which require the use of the red-hot iron, and the men are very few that would allow this barbarous treatment to be practised upon their own person; and we ask why any man should allow this noble animal to be subjected to any treatment that he would

not submit to upon his own person? Could the horse, like Balaam's animal, be for a moment endowed with the power of speech, he would say—Do not subject me to any treatment which you consider too cruel for yourself; for we, like you, have been created with nerves of sensibility, so that pain is as hard for us to endure as for you, and therefore we ask that you will always have mercy upon us (as a merciful man should do), and consider, before treating us (or neglecting to do so), whether it is doing just as you would be done by.

It might be of interest to some, for us to state here how Kendall's Spavin Cure happened to be discovered.

Our Experience with Bone Spavin.

The proprietor having a horse which he prized for her goodness and gentleness, and which in some way became spavined, was under the necessity of resorting to the popular remedies in use at that time, for the treatment of the spavin; after a few weeks' treatment the outlook seemed to be rather discouraging; but as we had had experience as a practicing physician, and also the benefit of all the receipts which were said to be cures—having been in the drug business for several years, and filled the receipts from the various horsemen in our vicinity—we felt that our experience had been such that we were certainly equal to the task, if any one was, and so we continued, first with this liniment, and then with the other, until we had gone through with the whole catalogue of the (so called) "*sure cures.*" We took counsel of the various horsemen who were quite sure their receipts would be just *the* thing, but when informed that all this and more too had been used we received but little consolation. As the horse was no better, and several weeks had elapsed since we began the treatment, our faith in the power of any remedy to even stop the lameness (to say nothing of removing the enlargement) was very weak; but still we were finally persuaded that a thorough use of blisters might cure, and it was our only hope, and we therefore proceeded to torment the poor animal by applying blisters about every two weeks, and giving the horse rest, until six blisters had been applied, during which time the horse was allowed to remain (nearly all summer) in the barn; and as the horse was no better, that we could perceive, it will be easy for any one to imagine our feelings in regard to the power of *any remedy* to cure bone spavin; and then we, like many others, were *very positive in our opinion* that there was nothing which would cure a bone spavin, and finally stopped all treatment.

About six weeks after we had stopped all treatment, we decided to give the case another trial, for it seemed to us that there was something that would effect a cure if we could only get the right thing. Instead of using the remedies which everybody said were sure cures, we began to reason about the matter, and it occurred to us that if we had been treating a human being we should have treated him in a more humane manner, and therefore we compounded a mixture which was entirely different from anything we had ever heard of being used, and again began to treat the horse, and, to our great surprise, in a short time (about two weeks) the lameness all subsided; and, by continuing the treatment a while after the lameness had subsided, the enlargement was entirely removed. I could hardly realize what a wonderful cure had finally been accomplished; but after preparing the same mixture for a great many cases, without hearing of its failing to cure in a single case, I was then fully satisfied of the *great worth of this remedy to horse owners*, and began to put it up for the public; and since that time the cures which it has effected have been almost innumerable, and now those who are most capable of judging of its merits pronounce it to be the best remedy for the purposes for which it is prepared that they have ever known to be used.

We therefore offer the *Kendall's Spavin Cure* to the public with perfect confidence, believing that in nearly if not every case in which a man might *reasonably* expect a cure, if he uses the Spavin Cure thoroughly and patiently, according to the directions, he will effect a cure. By the words "thoroughly and patiently" used above, we mean to use as directed on bottle, by *rubbing down to the skin well*, as what remains on the hair has no effect, and by applying over the size of the whole of the enlargement; but there is no good reason for applying all over the leg because one desires to be thorough and cover the whole of the bunch, for what is applied to the space outside of the enlargement is only wasted—but we frequently find parties who apply it almost indiscriminately to the whole of the hock-joint, when a space the size of a cent, perhaps, would be all that was necessary, and therefore the bottle of Spavin Cure is used, or rather wasted in a very few days, and the man finds his horse no better, and drops the use of the Cure, and perhaps condemns it, when he has not given it the slightest fair chance to effect a cure. By the word "patiently" we would be understood to mean, to apply it according to directions, for a long time, if *necessary*, for no difficulty of so serious a nature as spavin is, can be removed by *any* remedy in only a few days; and if any man would stop to consider he might know that it would be impossible. We might occupy many pages in relating our experience and in giving full directions for the use of Kendall's Spavin Cure, but will not add more here except to say, *use good common sense in applying it, and in the use of the horse.*

Please look over the following testimonials, many of which are from the most prominent gentlemen and horse owners, in the country. Also see treatment given for Bone Spavin, etc.

On Human Flesh.

Although Kendall's Spavin Cure was not originally designed to be used on human flesh, yet it has been found to work wonderful cures in thousands of cases, and now we have no hesitancy in stating that it is *the best liniment* for external use on human flesh that we have ever known to be used. It can be used full strength, with perfect safety, for rheumatism, neuralgia, or any lameness; also, for bruises, cuts, corns, frost-bites, burns, sprains, or for any purpose for which an external liniment is used. See testimonials.

WHAT SOME OF OUR PATRONS SAY OF IT.

Any one doubting the genuineness of any of the following recommendations is earnestly requested to correspond with the parties themselves, and if a three-cent stamp is enclosed it will be quite sure to bring a reply.

The following letter is from a gentleman who is widely known in the United States among owners of fine horses as being at the head of an extensive importing and manufacturing concern of all kinds of saddlery and horse furnishing goods:—

New York, N. Y., Feb. 26, 1882.

Dr. B. J. Kendall & Co., *Gents:*—I had a horse twenty-one years old on which a spavin had been for eight years, that caused severe lameness and trouble; and to test the virtue of Kendall's Spavin Cure, used up two bottles, which completely removed the trouble and lameness, and to-day goes as well as any young sound horse, and no spavin is to be seen.

Yours truly, C. M. MOSEMAN.

The following letter is from Johnney Murphy, who rode Dexter under saddle in 2:17 1-4, and is now one of the leading drivers in this country of fast horses. He has the largest stable of trotters, and handles all of Mr. Bonner's horses. His picture is all over the United States riding Dexter in 2:17 1-4.

Fleetwood Park, March 6, 1882.

H. C. Ditmas, *Dear Sir:*—In reply to your inquiry about how I like Kendall's Spavin Cure, I would say that I am exceedingly well pleased with it as a liniment for every purpose for which I ever tried it; and as I have handled the best horses in this country for many years, and a very large number of them, I have had many occasions to use it for the various injuries and accidents to which horse-flesh is liable, and have always found it to be the *best* medicine for what it is designed that I have ever seen or heard of. I cannot recommend it in too strong terms.

Yours truly, JOHNNEY MURPHY.

Showing how to find the Pulse.

In health the average number of pulsations are from 35 to 40 every minute. In disease the pulse varies in frequency and character.

Fossil, Wasco Co., Oregon, Dec. 24, 1881.

Dr. B. J. Kendall & Co., *Gentlemen:*—Enclosed you will find twenty-five cents in stamps. Please send me your revised edition of "Treatise on the Horse and his Diseases." I sent to Portland, Oregon, two hundred miles for your Kendall's Spavin Cure after seeing it advertised in the "Rural Spirit," published in Portland, Oregon, by W. W. Baker; and I can truly say it is the best preparation for the ailments of the horse that I have ever tried. I am quite an extensive horse breeder, having about one hundred head of horses at a time, and sometimes a great many more than that. I will say to you as I do to my neighbors, that I would not be without your Kendall's Spavin Cure no more than I would be without flour for my family. I bought three bottles, and they have been worth a good horse to me already, and only two bottles used yet.

Yours truly, LOUI MANNING.

NEW YORK, March 6, 1882.

DR. B. J. KENDALL & Co., *Gents:*—Your Kendall's Spavin Cure is the best stable liniment in existence. Yours truly, KELLY & BLISS.

Turf Exchange, 15 West Twenty-eighth St., N. Y.

GRAVESEND, LONG ISLAND, March 7, 1882.

B. J. KENDALL & Co., *Gents:*—Your Kendall's Spavin Cure works like a charm, and is the finest liniment in the world; and your Kendall's Blister is excellent. No stable should be without them. Yours truly, JOHN HAMLIN,

Supt. of Prospect Park Fair Grounds.

The following letter shows that the "Cure" will do just what we claim for it, if only persevered with. He should have used another bottle to have completely removed the bunch, but he persevered well to do what he did:—

CHARLTON, MASS., April 6, 1882.

DR. B. J. KENDALL & Co., *Gents:*—We have a four-year-old colt that, according to your horse book, has a splint or bony bunch on one of its fore legs. We have been treating it with your Kendall's Spavin Cure, and have been thinking it might hasten the cure if we blistered it. So we enclose one dollar for your preparation for that purpose. Any information in regard to the matter will be thankfully received. One year ago last summer I cured the mother of this colt of a bone spavin of some three years' standing. It was so bad there was no

An old method of casting a horse for operation, and one which is used by many at the present time.

perceivable movement in the joint when travelling, and some of my neighbors had advised killing the horse the winter before I commenced with your Kendall's Spavin Cure, she was so lame and stiff. I commenced on the mare, I think, about the 1st of May, I must say, with but very little faith, but with a firm determination to give Kendall's Spavin Cure one grand trial; and in order to do so, I felt bound to follow the directions in using the medicine as near as possible, and I think, so far as using but little of the "Cure" at a time, and rubbing it in well was concerned, I was most faithful to the directions. And yet after using two bottles there was no appearance of a change in the spavin or in the movement of the horse for the better. But on I went with the same steady hand, until five bottles were used up and the sixth bottle bought; but I owned Kendall's Spavin Cure had made a decided change, in both the size of the spavin and the movement of the horse, having liberated the joint to that degree that its movement was quite natural. As the lameness was very much better, we concluded to stop for a while using the Kendall's Spavin Cure, rubbing it now and then a little with the hand. From that, some four months from the time I began to treat the spavin, the horse kept on improving until all the effects of the spavin passed away except a small enlargement of it on the joint. I think one grand factor in this cure was wetting in the "Cure" so thoroughly. Follow the directions in using the medicine to the letter, and there can be but few failures of a cure. I write this as my testimony to a very valuable and honest-curing medicine, "Kendall's Spavin Cure." Respectfully yours, SILVESTER HAYWARD.

STAFFORD, N. Y., Aug. 30, 1881.

DR. B. J. KENDALL & Co., *Gents:*—In the year 1880 I treated with Kendall's Spavin Cure a fine mare that had two large ringbones of more than one year's standing, which caused severe lameness. I did not have much faith in it, but was doomed to disappointment, for after using one box Kendall's Blister and three bottles Kendall's Spavin Cure, the bunches entirely disappeared as well as the lameness, and the legs were as perfect as when foaled.

I have since sold the mare, and the purchaser tells me that he considers her legs as good as any horses', and as sound. Respectfully yours, A. E. MILLER.

BROOKLYN, N. Y., Feb. 24, 1882.

B. J. KENDALL & Co., *Gents:*—I can give my indorsement to your Kendall's Spavin Cure as the best stable liniment in use.

Yours truly, ANDREW MARSHALL,
Ex-Chief Engineer of the Brooklyn Fire Department, 316 Humboldt St., Brooklyn, E. D.

PROSPECT PARK FAIR GROUNDS, GRAVESEND, LONG ISLAND, March 7, 1882.

DR. B. J. KENDALL & Co., *Gents:*—Your Kendall's Spavin Cure is the best liniment in use for man or beast. It has cured some wonderful cases.

Yours truly, CHARLY McLAUGHLIN, Trainer and Driver.

The following letter from the Rev. Mr. Bonin, priest and rector of the parish of St. Emilie.

ST. EMILIE, QUE., April, 1882.

MR. L. ROSTAELLE, JOLIETTE, P. Q., *Dear Sir:*—I have made use of the bottle of Kendall's Spavin Cure which you sent me, and have obtained from it the most entire satisfaction. By the application of this remedy I have cured radically a lame horse, and it caused to disappear a spavin that rendered him unfit for sale. Fully convinced of the efficacy of this preparation, I intend to keep it constantly on hand, and I wish you to send me another bottle.

I remain yours truly, JOS. BONIN, Ptre.

OFFICE OF THE HARTFORD HOUSE, HARTFORD, KY., April 25, 1882.

DR. B. J. KENDALL & Co., *Gents:*—I hereby certify that I have used Kendall's Spavin Cure in my stable for four years last past, and I know of no other remedy that I prize so highly as a cure for sweeny, curb, and other sprains and bruises. Respectfully, W. T. KING.

FROM A PROMINENT PHYSICIAN.

WASHINGTONVILLE, OHIO, June 17, 1881.

DR. B. J. KENDALL & Co., *Gents:*—Reading your advertisement in "Turf, Field, and Farm," of Kendall's Spavin Cure, and having a valuable and speedy horse which had been lame from spavin for eighteen months, I sent to you for a bottle by express; which in six weeks removed all lameness and enlargement, and a large splint from another horse, and both horses are today as sound as colts. The one bottle was worth to me one hundred dollars.

Respectfully yours, H. A. BERTOLETT, M. D.

FREMONT, OHIO, Jan. 25, 1882.

DR. B. J. KENDALL & Co., *Gents:*—I think it my duty to render you my thanks for benefits and profits which I have derived from your invaluable and far-famed Spavin Cure. My cousin and I had a valuable stallion, worth $4000, which had a very bad spavin, and was pronounced by four eminent veterinary surgeons beyond any cure, and that the horse was done forever. As a last resort, I advised my cousin to try a bottle of Kendall's Spavin Cure. It had a magical effect. The third bottle cured it, and the horse is as well as ever. Dr. Dick, of Edinburgh, the eminent veterinary surgeon, was an uncle of mine, and I take great interest in assisting his profession. Yours truly, JAMES A. WILSON, Civil Engineer.

CINCINNATI, OHIO, March 31, 1882.

DR. B. J. KENDALL & Co., *Gents:*—I have used your Kendall's Spavin Cure, and given it a thorough trial, and deem it all that it is represented to be. I used it specially for treating a very bad splint, removing it entirely with one-half bottle of your mixture. There has been no sign of lameness since, and it has been two years since I used it, therefore I take great pleasure in recommending it to all horse owners.

Yours, etc., WM. BEALS, Foreman Cincinnati Omnibus Line.

ST. JOHNS, P. Q., Oct. 27, 1881.

DR. B. J. KENDALL & Co., *Gents:*—I have used your Kendall's Spavin Cure with great success on spavins, curbs, and splints. I know it to be a good remedy for ring-bones, bone spavins, cuts, galls, and all kinds of lameness, and many other difficulties about the horse. One of my men sprained his ankle very badly. I applied Kendall's Spavin Cure, and I never saw anything work like it, he was well in a few days. I know it to be good for man as well as beast. I procured one of your Treatise on the Horse, by mail, for twenty-five cents, and I think it was the means of saving me one hundred dollars on one horse that I treated, according to the directions given in your book, for displaced stifle. Yours truly, WM J. PEARSON.

If you do not want two feet in the same stirrup when you take your morning ride, do not buy a horse with the string-halt, as the disease is incurable.

FROM THE ONEONTA PRESS, N. Y.

ONEONTA, N. Y., Jan. 6, 1881.

Early last summer Messers. B. J. Kendall & Co., of Enosburgh Falls, Vt., made a contract with the publishers of the "Press," for a half column advertisement for one year, setting forth the merits of Kendall's Spavin Cure. At the same time we secured from the firm a quantity of books, entitled, "Dr. Kendall's Treatise on the Horse and his Diseases," which we are giving to advance paying subscribers to the "Press," as a premium.

About the time the advertisement first appeared in this paper, Mr. P. G. Schermerhorn, who resides near Colliers, had a spavined horse. He read the advertisement, and concluded to test the efficacy of the remedy, although his friends laughed at his credulity. He bought a bottle of Kendall's Spavin Cure, and commenced using it on the horse in accordance with the directions, and he informed us this week, that it effected such a complete cure, that an expert horseman, who examined the animal recently, could find no trace of the spavin, nor the place where it had been located. Mr. Schermerhorn has since secured a copy of "Kendall's Treatise on the Horse and his Diseases," which he prizes very highly, and would be loth to part with it at any price, provided he could not obtain another copy. So much for advertising reliable articles.

WINGHAM, ONT., Jan. 17, 1882.

DR. B. J. KENDALL & Co., *Gents:*—This is to certify that I have used Kendall's Spavin Cure, bought from C. E. Williams, Druggist, Wingham, Ont., and do without hesitation pronounce it to be an invaluable remedy for the cure of spavins, ring-bones, or curbs. I used it on a bone spavin of several years' growth, which it completely removed, and I can safely say, it will

remove any spavin, curb or ring-bone, if properly used. I have also recommended friends to us it, who have done so with perfect success. I gladly make this public, and will answer an questions or letters sent me. Yours, etc., GEORGE BRYCE

HAMILTON, Mo., June 14, 1881

B. J. KENDALL & Co., *Gents:*—This is to certify that I have used Kendall's Spavin Cure and have found it to be all it is recommended to be, and, in fact, more too; I have removed, b using the above, callous, bone spavins, ring-bones, splints, and can cheerfully testify and rec ommend it to be the best thing for thrush or any bony substance I have ever used, and I hav tried many, as I have made that my study for years. Respectfully yours, P. V. CRIST

Read this testimonial from one of the oldest breeders on Long Island, James Van Sickler proprietor of the Old Van Sicklen House.

CONEY ISLAND, Dec. 25, 188

DR. B. J. KENDALL & Co., *Gents:*—No person that owns a horse should be withou Kendall's Spavin Cure in their stable. As a liniment, it is the best I ever used, and will do a they claim. The Kendall's Blister does its work like a charm. Always ready for use an easily applied. Try it, and you will use no other.

Respectfully yours, JAMES VAN SICKLEN

NORTHFIELD, JACKSON CO., WIS., Feb. 16, 188

DR. B. J. KENDALL & Co., *Sirs:*—I thought I would write a few lines to you, in referenc to your Kendall's Spavin Cure. I saw one of your advertisements in our county paper. thought I would try it. I went to our merchant and druggist, at Hixton, and asked him to sen for some, but it was a long time before he got any, but finally I persuaded him to send. I pu chased a bottle, and commenced to use it on a mare that has had a spavin for three years, but could not go according to directions, I had to work her hard every day. I used three bottles c Kendall's Spavin Cure, and my mare is well. I had plenty of Spavin Cures in the house, but did not want to use them, because they would blister. I have handled horses ever since I wa large enough to hold a halter-strap, but I never found anything to equal it. It did not take th bunch all off; but I think if I had not worked her, it would have taken it all off, especially if had continued its use a little longer; but I would like to say to the public, that it is one of the be liniments that was ever kept in a barn or house, for man or beast. This cure was performed ove one year ago, and she has not showed signs of lameness, and has worked very hard.

Yours truly, P. M. WILSON

GRAVESEND, L. I., Feb. 14, 188

DR. B. J. KENDALL & Co., *Sirs:*—Enclosed you will find (Hiram W. Howe's) testimonia He is proprietor of the Brooklyn Driving Park, and one of the best known trainers of trotters i the country. He is the gentleman that trained "Aberdeen," and drove him in the great thre year-old colt stakes, at Prospect Park Fair Grounds, "Aberdeen" winning in straight heat The only race he ever trotted, as Captain Rynders placed him at the head of his "steed," th following Spring. BROOKLYN DRIVING PARI

GRAVESEND, L. I., Jan., 188

DR. B. J. KENDALL & Co., *Gentlemen:*—It gives me great pleasure to forward you my test mony in respect to your Kendall's Spavin Cure.

It is without exception the best liniment used. It should be in every family and stable i the United States. Yours respectfully, HIRAM W. HOWI

ADAMS, N. Y., Jan. 30, 188

DR. B. J. KENDALL & Co., *Gents:*—Having used a good deal of your Kendall's Spavin Cu with great success, I thought I would let you know what it has done for me. Two years ag I had as speedy a colt as was ever raised in Jefferson County. When I was breaking hir he kicked over the cross-bar and got fast and tore one of his hind legs all to pieces. I employe the best farriers, but they all said he was spoiled. He had a very large thorough-pin, and I use two bottles of your Kendall's Spavin Cure, and it took the bunch entirely off, so he afte wards sold for $1800. I have used it for bone spavins and wind galls, and it has always cure completely and left the leg smooth.

It is a splendid medicine for rheumatism. I have recommended it to a good many, and th all say that it does the work. I was in Witherington & Kneeland's drug store, in Adams, t other day and saw a very fine picture you sent them. I tried to buy it but could not; they said I would write to you that you would send me one. I wish you would, and will do yo all the good I can. Very respectfully, E. S. LYMA

COATICOOK, P. Q., CANADA, Feb. 20, 188

DR. B. J. KENDALL & Co., *Gents:*—I desire to add my testimony to the value of your tru celebrated Kendall's Spavin Cure. Before using your remedy I tried six or eight different kin of medicines, which were claimed to be the best remedies for spavin, but all without effe and my horse was lame for about eight months. I finally began using Kendall's Spavin Cure, a in two weeks he was all right, after using only one bottle, and has not been lame minute since that time, which has now been thirteen months.

Yours truly, J. T. MARCHESSEAUI

PENTWATER, MICH., March 28, 1882.

DR. B. J. KENDALL & CO., ENOSBURGH FALLS, VT., *Gentlemen:*—I have used your Kendall's Spavin Cure in a great many cases of puffed hock, bog spavin, thorough-pin, and other blemishes on horses, and it has proved a success with me in every instance. I can cheerfully recommend it as one of the best absorbents I ever used; and no farmer or horse-breeder should be without it. Respectfully yours, SAMUEL A. BROWNE,
Sec. and Treas. Pentwater Lumber Co.

FENWICK, ONTARIO, CANADA, June 13, 1881.

DR. B. J. KENDALL & CO., *Dear Sirs:*—I procured a bottle of Kendall's Spavin Cure from your agent in Montreal, and used it on a bone spavin, and it has stopped the lameness and removed the enlargement so that it is as smooth and sound as it ever was. I also used it on a callous on the outside of the leg, and it has taken it off so that it cannot be seen. I have used about two bottles on the above, and I think it has increased the sale of the mare more than twenty times the cost of the book. Your book is the most valuable for the price I have ever seen.
Yours respectfully, JAMES GARNER.

P. S. If the above is of any use you are welcome to use it, as I cannot recommend it too highly.

This engraving illustrates the folly of a heavy man riding a colt hard all day. Be merciful to your beast.

GREENPOINT, L. I., March 20, 1882.

DR. B. J. KENDALL & CO., *Gents:*—Your Kendall's Spavin Cure is the best stable liniment in use. And I honestly recommend it to all. Yours truly, EDMUND RYSDYK.

EAST SANDY, PA., Feb. 14, 1882.

DR. B. J. KENDALL & CO., *Gents:*—I have used just two bottles of your Kendall's Spavin Cure, and have removed a blood spavin on my horse in four weeks. I recommend your Kendall's Spavin Cure to everybody. Enclosed find fifty cents; please send me two of your horse books, and oblige, E. FICHTE.

CLAREMONT, N. H., Sept. 20, 1881.

DR. B. J. KENDALL & CO., *Gents:*—I have had two horses with spavins and I have cured them both with only two bottles of your Kendall's Spavin Cure. I call it the best article ever got up in the world. I see you know the nature of a horse clear through. Please send me one of your illustrated horse books. I enclose twenty-five cents for the same.
Yours truly, ISRAEL VADNEY.

CLINTON HIGHTS HOTEL, EAST GREENSBORO, N.Y., Dec. 12, 1881

DR. B. J. KENDALL & Co., *Gents:* — In justice to your valuable medicine, known as Kendall' Spavin Cure, I wish to inform you that by the recommendation of I. H. Miller, Druggist I was induced to try it on some cases I had on hand last Spring. And I met with good success and since have used it in cases of spavin, thoroughpin, splints, curbs, and all callouses and puff with the same result, and do not hesitate to recommend its use in general.

Yours respectfully, C. BRADLEY, Dealer in horses

NEW HAMBURG, ONT

MR. F. H. MCCALLUM, Druggist, *Dear Sir:* — The bottle of Kendall's Spavin Cure bough from you last Summer, gave me the utmost satisfaction, and performed a wonderful cure upon mare nineteen years old, belonging to me, which was badly spavined for ten years. She was s lame that I could hardly get her to move. The lameness is entirely gone, after using half bottle of the Cure, and she is like a young horse again. Yours truly, JOHN F. ROTH

BRISTOL, ILL., Sept. 13, 1881

MESSRS. B. J. KENDALL & Co., *Gentlemen:* — Two years ago I had a valuable trotting hors which developed a curb, and before I could "get to it" it had continued six months, and woul have probably damaged me to about the value of my horse, but I got hold of one of you "Treatise on the Horse," which claimed that a cure for curb can be effected by the use o Kendall's Spavin Cure, and, although doubting, I nevertheless tried it, with the greatest possibl satisfaction; for it cured my horse by entirely removing the curb, which has not again appeared I consider it one of the best liniments that I ever got hold of.

Yours truly, CHAS. E. BICKEL

OFFICE OF H. C. PECKHAM, M. D., Druggist, FREEPORT, MICH., Feb. 20, 1882

DR. B. J. KENDALL & Co., *Gentlemen:* — I enclose testimonials from Moore & Yarger, promi nent business men of this place.

I take pleasure in forwarding you such good evidence of the merits of your justly celebrate Kendall's Spavin Cure. Very respectfully, H. C. PECKHAM

FREEPORT, MICH., Feb. 20, 1882

DR. H. C. PECKHAM, *Dear Sir:* — We take pleasure in certifying, that one bottle of Ken dall's Spavin Cure cured a valuable horse for us. A few applications entirely scattered tw large spavins from the horse, after using the Cure, as directed, for nearly two weeks. W consider that the one bottle was worth at least one hundred dollars to us.

MOORE & YARGER, Hardware Dealers

GRAVESEND, L. I., Jan., 1881

DR. B. J. KENDALL & Co., *Sirs:* — Your Kendall's Spavin Cure is the best liniment I eve used in the stable.

Yours respectfully, DANIEL DUNLEY, (Prospect Park Fair Grounds)

Mr. Dunley is a veteran trainer of trotters, and has the handling of Lady Prechard an White Stockings. Each with a record of 2:21, besides several other good ones.

LOS ANGELOS CITY, LOS ANGELOS CO., CAL., Post Box 1007, Feb. 26, 1882

DR. B. J. KENDALL & Co., *Gents:* — Having used your Kendall's Spavin Cure, I find it th best remedy for horses that has ever been used on this coast. I have a fine colt that was kicke last Fall on the point of the shoulder, and for three months had no use of his leg, and by usin two bottles of your Kendall's Spavin Cure, he is entirely cured. I enclose twenty-five cents fo which please send one of your horse books by mail, and oblige, C. W. THAYER

BRYANSVILLE, YORK CO., PA., March 10, 1882

DR. B. J. KENDALL & Co., *Gents:* — I have used Kendall's Spavin Cure and Kendall' Blister on several bad cases of spavin, and they gave satisfaction in every case. I have taken of spavins by their use, and never left a lump or any bad effect from the use of it.

Yours truly, JOHN R. JONES

BELMONT, N. Y., Aug. 27, 1881

DR. B. J. KENDALL & Co., *Gents:* — I cheerfully testify to merit in your Kendall's Spavi Cure. An old horse in my possession had been very lame for several weeks, and there was bunch on the hock-joint; those competent to judge pronounced it to be a spavin. I used a bottl of your remedy, which entirely removed the enlargement and cured the horse of lameness.

Truly yours, JAMES E. NORTON, Publisher "Genesee Valley Post."

EAST BOSTON, MASS., June 16, 1880.

DR. B. J. KENDALL & Co., *Gents:*—I received your Kendall's Spavin Cure to-day. I send you the pay in full, also a bundle of the back papers, "Our Dumb Animals," and have put your name on our list, so that hereafter you will receive them monthly. Your medicine is used by our "Society." I have used it, and find it all you recommend it to be. Thanking you for your kindness, I remain your obedient servant, J. BAKER,

Agent for the Massachusetts Society for the Prevention of Cruelty to Animals.

OFFICE OF J. VAN DE BOGART, Wholesale and Retail Manufacturing Confectioner,
PITTSFIELD, MASS., Feb. 19, 1882.

DR. B. J. KENDALL & Co., *Sirs:*—Your remedy, Kendall's Spavin Cure, is an immense success. It is something every stableman or horseman, as well as farmer, should possess. It will save them a great many dollars. Please find enclosed twenty-five cents for your book.

Yours respectfully, J. VAN DE BOGART.

A sure method of converting a good horse into a poor one.

MELLENVILLE, N. Y., Aug. 29, 1881.

DR. B. J. KENDALL & Co., *Gents:*—I would like to make known to those who are almost persuaded to make use of Kendall's Spavin Cure the fact that I think it a most excellent remedy. I removed a hard bunch from the breast of one of my horses with one bottle of Kendall's Spavin Cure. Had used almost everything else and failed. Respectfully yours, CHARLES JONES.

HARLEM, N. Y., 69 East 130th St., March 25, 1882.

DR. B. J. KENDALL & Co., *Gents:*—I feel it my duty to recommend to the general public Kendall's Spavin Cure liniment. I have been using different kinds of liniment for the last fifty years. But yours is the best for general use in the stable on horses that I ever used, and will urge every trainer through the great trotting circuit next summer to use it and no other.

Yours most truly, MARK MAGUIRE, Sporting Reporter of "N. Y. Sun."

BOSTON, MASS., Aug. 8, 1881.

DR. B. J. KENDALL & Co., *Gentlemen:*—Your Kendall's Spavin Cure is a grand success. I had a colt taken lame last January with spavin. I applied the Cure two months, and the colt was well; been cured ever since; no return of lameness. C. E. CONANT, 73 Union St., Boston.

LOOK WELL TO YOUR HORSE'S FEET.

These drawings show how many horses are made lame and permanently injured by the use of the COLD-CUT and SHEARED POINTED nails. This process of manufacture produces lamination, causing the iron to form in layers, and when driven into the foot the horny fibres of which the hoof is composed cause the nail to separate at the point, and one portion passes into the foot.

No. 4 represents one of these nails, which was driven into the hoof, and SLIVERED in driving, one THIN blade passing into the quick or sensitive sole. No. 5, the THICK blade of the nail, passed out of the wall of the hoof for clinching. After a few days the horse was returned lame, and, upon removal of the shoe, a nail similar to the above was broken off, leaving a sliver in the foot. LOCKJAW ensued, from which the horse died. Upon dissecting the foot, a portion of the nail was found to have penetrated through the coffin bone, as seen in Fig. 2, letter A, thus sacrificing the life of a valuable animal.

As the remedy lies with the owner of the horse, it is for him to prohibit any cold-rolled or sheared nails being used in his horse's feet. The only Hot-forged and Hammer-pointed Horse-Shoe Nail in the World that is NOT CUT, CLIPPED NOR SHEARED upon the point, and will not split in driving, is the PUTNAM NAIL. See that your horse is shod with this nail, and avoid all risks.

This drawing was made from the nail taken from the hoof and coffin bone, as shown in Figs. 1 and 2.

This drawing was made from a nail, showing the lamination of iron in the COLD-ROLLED AND SHEARING process.

Every Putnam Nail is drawn down to a point from the rod, thus:

The illustrations of the Putnam Nails are very interesting, as showing the superiority of the nails made by the hot-forged process. The slivering of inferior nails, we are assured, is not overdrawn, and what instruments of torture such jagged iron must be to the sensitive foot of the horse can be imagined. The recommendations of these Nails, signed by W. H. H. Murray, Robert Bonner and Budd Doble, speak for themselves, and could be indefinitely reduplicated.—*The Spirit of the Times, New York, November 8, 1879.*

We address these lines to HORSE OWNERS, because they are the parties most vitally interested. We feel assured that, after knowing the facts, and giving the subject due consideration, they will, in company with such gentlemen as Messrs. BONNER, MURRAY, CHAS. S. GREEN, BUDD DOBLE, JAS. G. BREEZE, and many other CELEBRATED JUDGES OF HORSES, INSIST that their horses must be shod with the Putnam Hot-forged and Hammer-pointed Nail. A few months' trial will always convince.

P. O. Address,
Neponset, Mass.

THE PUTNAM NAIL COMPANY,
BOSTON.

OFFICE OF W. R. BURGOYNE, Pharmacist, STEUBENVILLE, OHIO, Oct. 3, 1881.

MESSRS. B. J. KENDALL & Co., Enosburgh Falls, Vt., *Gents:*—Enclosed please find P. O. money order, for which please forward one dozen "Treatise on the Horse and his Diseases." The Kendall's Spavin Cure has given universal satisfaction to all my customers who have had occasion to apply it to the almost incurable disease. Truly yours, W. R. BURGOYNE.

CANNON FALLS, MINN., Aug. 18, 1881.

DR. B. J. KENDALL & Co., *Gents:*—I have used two bottles of Kendall's Spavin Cure on a horse of mine, and removed a large bone spavin in about three months' time, and the horse is now perfectly sound, and his leg smooth. Yours respectfully, D. PLATT.

EAST BRADY, PA., Aug. 23, 1881.

DR. B. J. KENDALL & Co., *Gentlemen:*—The fact is now patent to all, that Kendall's Spavin Cure is the "sine qua non," wherever it can be applied. For horses it has no equal, and many persons speak loudly in its praise. I sell more of it than any other horse liniment. I consider it a specific. Yours truly, R. ROBINSON.

EXTRACTS FROM A FEW LETTERS.

J. C. JOHNSON, JR., ADAMS, MINN., March 4, 1882.

Kendall's Spavin Cure has cured three horses for me: two of blood spavin, and one of bone spavin.

JNO. C. CUMBER, RICHLAND, MO., Oct. 11, 1881.

Kendall's Spavin Cure has cured a horse for me when everything else failed. It is the best in the world. Hence I recommend it to all who handle horses.

JAMES BOWERS, 364 ELK ST., BUFFALO, N. Y., March 7, 1882.

Dr. Kendall's Spavin Cure has cured a spavin on my horse. It is the best medicine in the world.

JOS. W. WEEKS, NO. 11 CHESTNUT ST., LYNN, MASS.

I have cured two curbs with Kendall's Spavin Cure.

M. A. TOULSON, CHESTERTOWN, MD., Feb. 10, 1882.

Your Kendall's Spavin Cure has ready sale here since its introduction, and has made some remarkable cures.

SEND MONEY BY "AMERICAN EXPRESS CO'S MONEY ORDERS."

They are Safest Cheapest and Most Convenient. For Sale at all offices of American, United States and Canada Express Co's.

RATES.

1 to 5 dollars, 5 cts. 5 to 10 dollars, 8 cts. 10 to 20 dollars, 10 cts. 20 to 30 dollars, 12 cts. 30 to 40 dollars, 15 cts. 40 to 50 dollars, 20 cts. Can be Cashed at over 6000 places in the United States and Canada. Also through Bank Clearing Houses in New York, Boston, Chicago, and St Louis.

Dr. B. J. KENDALL CO.'S NEW LABORATORY.

IT is with pleasure that B. J. KENDALL & Co. can now call the attention of their many friends and the general public to their New Laboratory, of which the cut on the last page of the cover of this book is a good representation. A few words of explanation may be of interest. The main building is entirely new, having been erected the past season. It is three stories in height, with basement under the whole building. The location is delightful, being on a rise of ground which gives a commanding view of the whole town, and from the tower the valley of the Missisquoi river can be seen for many miles, and with the Green Mountains in the background, and the valley at your feet, combines to make as rich a landscape view as can be had in this country. The far famed Mount Mansfield, which is snow-capped nearly three-fourths of the year, can be distinctly seen in the distance with the naked eye. The buildings and the surroundings by many are pronounced the finest of the kind in the country.

The main building is divided into different departments. The basement has two furnaces for heating the whole building, and a large steam-engine which furnishes power for the printing presses, elevator, etc.; also, most of the packing is done here.

First floor contains the offices of the Company, drug, manufacturing, bottling, corking, and stamping rooms. Second floor consists of two large rooms, one devoted entirely to the advertising department, and the other, a large room used entirely for printing purposes, in which there are several presses in constant operation, supplying the great demand for advertising matter. The third floor is used wholly for storage for bottles, printing paper, etc., etc.

With these increased facilities, the Company find that even now they have hardly room enough to meet the great demand made upon them, and at an early day they contemplate making extensive additions.

The great success which has attended the introduction of

KENDALL'S SPAVIN CURE,

in all parts of the United States and Canada, has never been equalled, and it is now considered by the best Veterinary Surgeons and most extensive horse owners in the country to be the greatest discovery in the Veterinary Science of the Nineteenth Century. It is giving the very best satisfaction wherever used.

A FEW REASONS WHY!

1st. *It does not blister or cause any sore, which makes it a desirable liniment for man as well as for beast.*

2d. *It is sure in its effect.*

3d. *As a household liniment it has no equal. Its effects on human flesh are marvellous. In cases of rheumatism, any deep-seated pain, strain, sprain, or any lameness, it has no equal.*

4th. *It cures spavins, splints, ring-bone, curb, sprains, swellings, and all kinds of lameness.*

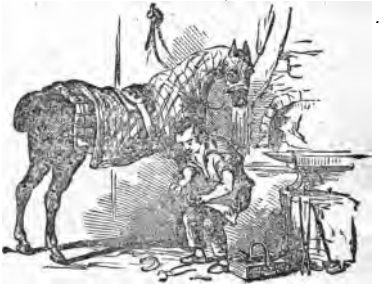
For further information, address

DR. B. J. KENDALL CO.,
Enosburgh Falls, Vermont.

SHOEING.

WITH a poor hoof an otherwise valuable horse becomes almost worthless, so that the common saying, "No foot, no horse," is practically correct. For this reason the subject of *horse-shoeing* is one which should receive much attention, as it is by poor shoeing that so many horses are rendered almost valueless for life.

For want of space we can only give some of the more important points which should be observed in order to preserve the hoof in a natural and healthy condition.



The hoof, in its natural state, is adapted only to a grassy surface; so that, when we wish to bring the horse into practical use upon our hard and stony roads, it becomes necessary to protect the hoof, by shoeing, from the unnatural wear and tear which it is subjected to.

It is greatly to be regretted that so large a share of the men who are permitted to do this very important work of shoeing the horse, are so ignorant of the nature and structure of the foot and the principal rules which *should* guide them in doing this very important branch of work.

It is a great fault of nearly all shoers that they cut and pare with the idea of improving the foot, when their aim should be, mainly, to let nature have her course as much as possible; or, in other words, to imitate the natural condition of the foot, and only pare away such parts as have become useless. The shoe should always be fitted to the foot, and not the foot to the shoe, as is too often practised. That part of the hoof which should not have pressure is the portion between the bar and the quarter, commonly known as the seat of corns. (For location, see engraving on tenth page.)

The greatest pressure should be around the outside of the foot, for about half an inch.

The frog should be allowed to come to the ground, which will prevent, to a certain extent, the concussion which would otherwise take place. *The frog should not be cut down*, as is frequently practised, nor should it be touched, when healthy, except for the purpose of cleansing.

In paring the foot, be very careful not to cut down the outside, so as to allow the entire weight to rest on the inside of the shoe upon the sole; but only cut away the dead portion of horn on the sole, and cut down the wall from heel to toe until the bearing is natural, leaving it even and as near its natural state as possible. A red-hot shoe should not be allowed to be burned into the foot to fit it.

The shoe to be selected should depend upon the condition of the foot and the condition of the roads, etc. The flat shoe, when properly applied, leaves the foot nearest its natural shape, by allowing the horse a good, even foundation to stand upon, and is most likely to give satisfaction for all ordinary purposes. At some seasons of the year it will be necessary to have calks upon the shoes, but ordinarily the foot should be allowed to come as near the ground as possible.

What we mean by the *flat shoe* is one flat upon its superior surface, which comes in direct contact with the hoof, the under surface being partially concave, so as to assist the horse in grasping the ground, to prevent slipping, and to assist in progressing.

The shoe should be as big as the foot, so as not to require any cutting down the hoof so as to make it fit the shoe, and the heels of the shoe should not be permitted to project backwards beyond the heel of the hoof more than about one-eighth of an inch.

The outward margin of the shoe should just correspond with the shape of the foot, except at the heel, where the shoe should be a little wider from quarter to heel, especially on the outside.

Many persons are not aware of the thinness of the hoof, which makes it quite necessary that the nail holes should be near the edge, and quite well forward in the toe, so as to avoid driving the nails into the quick, which would cause serious lameness and injury.

Do not rasp under the nail clinches, nor over them; and do not use the rasp at all on the outside of the hoof, not even below the clinches, except just enough near the shoe to round the edge, and do not cut down the hoof if you have used a shoe which is too small.

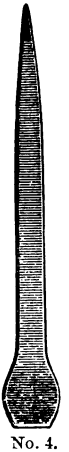
A nail for a horse's foot differs materially from every other kind of nail, not only in shape, but in the quality of iron from which it should be made; it is important that it should be made from the very best of iron, free from flaws, seams, liability to sliver, and all sulphurous gases in the process of manufacture. It is presumed that every shoer knows that a nail *forged* hot, from the end of a rod, needs no argument to convince any one that a *better* nail is thus obtained than by punching, rolling, and shearing them from a cold plate. The numerous and well authenticated cases where valuable horses have been *ruined* by using cold rolled nails are enough to deter any first-class shoer from driving anything but a *hot forged* nail, even if its cost should be double that of the cold rolled nail, because no shoer can take the risk of injuring his customer's horse.

Use only the very *best* of nails; drive as *small* and few nails as will hold the shoe firmly and securely to its place. See that the nails fill the holes and the heads the crease, leaving little, if any, to project beyond the ground surface when finished, thus preventing the clinch from rising when brought in contact with stones, and saving the injuring of the ankle.

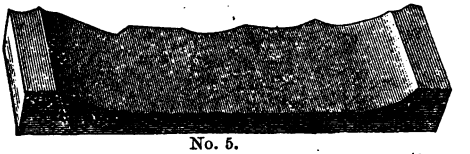
No. 1.

No. 2.

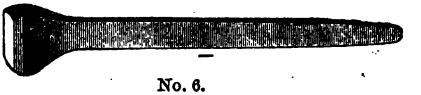
No. 3.



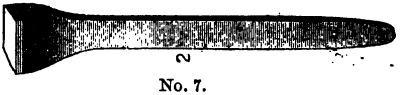
No. 4.



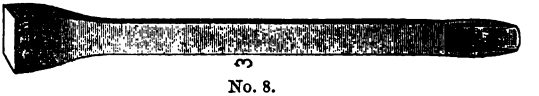
No. 5.



No. 6.



No. 7.



No. 8.

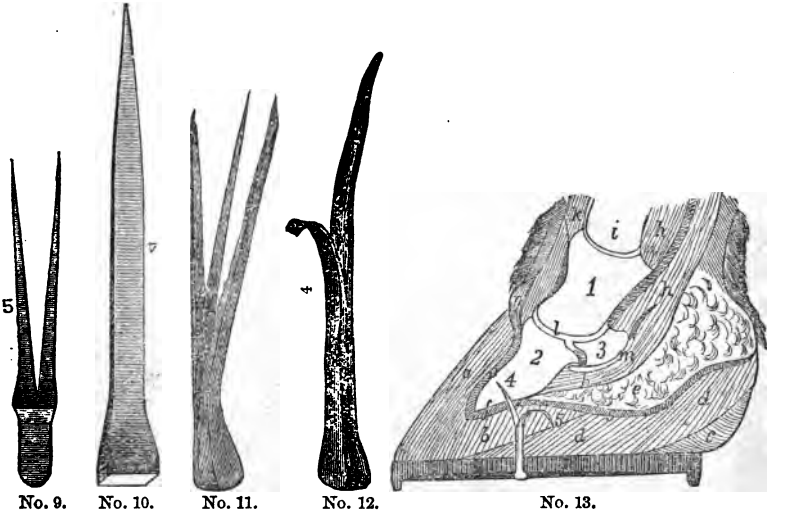
No. 1 is made from a nail such as is used in Oriental countries, for attaching shoes to their horses' feet, and has been employed since the fifteenth century.

No. 2 is an ordinary *hand-made* nail made from the rod when at a welding heat, and still in use in England and Europe, and also in the United States, until the introduction of the Putna-

Hot Forged Nails, which were the first successfully introduced Hot Forged machine nails; and **No. 8** shows the similarity of manufacture to that of the hand-make, and when in a *finished condition* it is identical with those of hand-make when ready for use, and has no equal in the long list of machine-made nails.

No. 5 represents a cross section of iron from which the cold-punched and sheared nails are made by forcing a blank therefrom by means of a punch which gives a *blank* similar to No. 6. No. 7 the same as No. 6, but made *hot* instead of cold. These blanks are put through a series of rollers and drawn into the form of No. 8, with an indentation on the thin end for the *scarfed* points, which conduct the nail out of the hoof.

No. 9 represents the piece which is removed by shearing the blade of No. 8, and produces the nail No. 10 complete. All are aware that the rolling of iron cold produces what is termed lami-



No. 9. No. 10. No. 11. No. 12. No. 13.

nation, causing the iron to separate in layers, as shown in No. 11. But as the compression of shearing holds the edges together, it does not show itself until driven into the hoof, when the horny fibres cause them to separate while being driven, and one portion is forced *into* the foot, and the other *out* through the wall of the hoof, thus causing lameness, lock-jaw, and death, as has been frequently the case since the introduction of cold rolled nails, which the records of State courts, as well as the testimony of celebrated horse owners, abundantly show.

No. 13 was taken from a hoof to show the result of a cold-rolled and sheared-pointed nail, which produced the death of a valuable animal, and for which carelessness the owner received no remuneration.

The nail used is of great importance, as will be seen from the above statements, and we wish to caution our readers against permitting the shoer to use nails which will endanger the lives of their horses. Having examined carefully many different kinds of nails, we are perhaps as well qualified to judge of their merits as any one in this country, and we therefore state, for the benefit of our readers, that we consider the Putnam Hot Forged Nails far superior to any nail we have ever seen.

BREEDING.

This very important subject is too often neglected. A common mistake in breeding is often made, that mares are bred from after they become useless for work, regardless of hereditary diseases which may be transmitted to their offspring. It should be remembered that one of the characteristic laws of life is the reproduction in kind — "like begets like."

Both parents should be selected with reference to their individual points of excellence, and also so that the points of one may be adapted to the points of the other; for, although both may be excellent individually, the points which characterize one may actually counteract those of the other; but, if defects exist, the breeder should be sure that it is merely accidental and not natural.

None but sound parents should be bred from (accidents, of course, are not to be regarded as unsoundness). Both parents should be free from any infirmity relative to a vicious temper or bad disposition, although the points of excellence in one way sometimes counteract the bad points in the other relative to that defect. Great care should be exercised that the same defect does not exist in both. Some knowledge of the parentage of the sire and dam is therefore indispensable.

For ordinary business purposes the best form of a mare to breed from is a short-legged beast, with a deep and roomy chest, wide hips, and so built in every way as to indicate a robust animal, with a strong constitution. Always avoid, if possible, selecting a mare for breeding purposes which has ring bone, spavin, or any disease that will render the offspring liable to be afflicted with the same by hereditary descent.

The "breed" should be taken into consideration also. If it is desired to raise a carriage beast, select a mare with a good, animated countenance, sprightly, not too nervous nor too sluggish, but with a general muscular structure. The head of the brood-mare is a point which should be always regarded, for a mare that has a large head, with a dull, stupid countenance, will not breed a good foal, unless it might be from a very sprightly, ambitious horse. The shoulder blade should be wide and long, extending nearly to the top of the withers, and so well covered with muscle as not to present any undue prominence.

The neck should come out from the top of the withers and not low down; the fore-leg should be perpendicular, so that the point of the shoulder and the toe will be in a right line; the foot should be sound and of good, symmetrical shape.

The hips should be long, oval, and broad; the hock-joint should be well formed, and not of the "cow-hock" or "sickle-hock" kind.

In selecting a stallion, the rules which we have already given should be observed, remembering that compactness is quite essential, that much goodness and strength may be condensed into a small space. The shoulder should be well back, with the shoulder blade lying obliquely, except that, when it is desired to raise a slow draught-horse, a large stallion, with upright shoulders, should be selected.

In summing up the whole matter we would say, if you would be successful in breeding, do not breed into the same family and blood, but select a horse of different blood, unless it should be eight or ten generations removed.

Avoid using a horse which is defective in any particular, when the mare has the same defect, but select one as nearly perfect as possible in that point. Do not breed small mares with very large horses, for there should be mutual adaptation in size and form, as we have before stated.

PROF. FLINT'S HORSE AND CATTLE RENOVATING POWDERS.

Having thoroughly tested the virtues of the above named powders, and found them to be the most remarkable and valuable powders we have ever known to be used for horses or cattle, we have completed arrangements whereby we are enabled to furnish these powders to our patrons throughout the United States and Canada.

AS A BLOOD PURIFIER these powders have *no equal* to our knowledge for any disease or bad condition caused by impure blood. Every man knows, or should know, that thousands of horses are sick or in BAD CONDITION, as their owners say, simply because their blood is impure, which is caused by the horse being kept in a barn where the atmosphere is foul, or by being fed on improper food. We have no hesitancy in saying that PROF. FLINT'S RENOVATING POWDERS are the *very best remedy known* (in our opinion) for any ill condition or sickness caused by impure blood, which may be known by the horse looking poor, being dull, coat being rough and not looking thrifty, hide bound, legs swelling, etc. We never knew it to fail (in any case of ill condition as described above, after one or two pounds had been given to a horse according to directions), but what the horse would fat up in a very short time, and act entirely different, really making him a new horse.

FOR COUGHS.—We have always found it a perfect cure for every kind of a cough, whether of short duration or of long standing; if given until one to three pounds had been used for cases of long standing. See page 53 of this book.

EPIZOOTIC.—This disease prevails at times to an alarming extent, and as we have tested the virtues of these powders in hundreds of cases of epizootic, we know that no remedy can be more valuable, for we never knew it to fail of curing this disease in a few days, and no case that we ever treated with them was afflicted with the bad after-effects which usually follow with those treated with ordinary remedies, or left to themselves without treatment. See the treatment recommended for EPIZOOTIC on page 55 of this book.

PINK-EYE.—This disease, which is similar in its nature to epizootic, in the extent to which it prevails at times, is best treated with these powders. See treatment on page 63 of this book.

HEAVES.—We never have had occasion to use any remedy for this disease ourselves, but several parties have reported to us that they have cured cases of heaves with PROF. FLINT'S RENOVATING POWDERS, and we believe them to be excellent for this disease. See page 59.

We can send these powders by *mail, postage prepaid, for 50 cts.*, for a large package weighing about one pound or over, or five packages for $2.25. Address all orders to

DR. B. J. KENDALL COMPANY,

Enosburgh Falls, Vermont, U. S. A.

KENDALL'S PERSIAN PILLS.

A purely vegetable compound, which we claim to be the *best laxative or cathartic* for family use which is known to the medical profession.

FOR COSTIVENESS or constipation, there is no remedy, which has yet been discovered by any one to our knowledge, that is any comparison to these pills when taken as we direct, in the fore part of the book, in the treatment of CONSTIPATION, which see, page 14.

FOR LIVER COMPLAINTS. — Kendall's Persian Pills never have had an equal, as they are specially adapted to cases of this kind. *Millions of people*, scattered all over the world, are afflicted with some form of *liver complaint*, and are ignorant of the real cause of their sickness and many bad feelings; and to assist this class, we have treated these diseases, at length, in the fore part of this book, under the head of LIVER COMPLAINTS on page 24, and we hope that every person who is afflicted in any way which they do not understand, will consult this part of the book, and ascertain if their case is not one of some form of liver derangement. The Kendall's Persian Pills being composed of the very purest vegetable extracts known to the medical profession, and being entirely without any calomel or any other mineral, there cannot possibly be any better remedy known for this class of diseases. The directions will be found on each box; but *you should exercise good common sense in their use*, for with some it will be found that after a trial it may be necessary to *increase the dose*, while with others it may be necessary to give a *smaller dose*. *You should remember this fact in all cases*, because different persons vary much in regard to the condition of the bowels and liver.

AGUE and all forms *of malarial diseases* are more successfully treated with these pills than with any others, but in some cases other medicines will be required to assist the Kendall's Persian Pills, in order to secure the best and most speedy recovery. For farther information in regard to these matters, see treatment of AGUE on page 6.

IMPURE BLOOD. — Sickness is very often caused by impure blood, and the patient, although in a very bad condition, and being troubled with sores, boils, headache, and a variety of bad symptoms, may not be able to say that he is afflicted with any regular form of disease; and yet, the cause of all the bad symptoms can be traced to an impure state of the blood, if his case was thoroughly investigated. For all such cases the patient should procure the Kendall's Persian Pills, and take one at bed-time every night, or if they should happen to loosen the bowels too much, only take one every other night; but if habitually costive, it may be necessary to increase the dose. In addition to a proper use of the pills, you would probably do well in most cases to take an alterative, either No. 1 or No. 2, found among the FAVORITE PRESCRIPTIONS on page 42, and continue the use of the pills and alterative for several days, or until there is a complete recovery.

If the above directions are followed, you will find these remedies to make the best Blood Purifier that was ever produced.

TO REGULATE THE STOMACH AND BOWELS. — No remedy equals Kendall's Persian Pills. They should be used in small doses of one or two pills at bed-time, and repeated from one to seven times a week, according to the requirements of each individual case.

HEADACHE. — This originates from a variety of causes, and can be successfully treated in most cases by a judicious use of Kendall's Persian Pills, to regulate the stomach and bowels.

These pills are superior to Blue Pills or Calomel, with none of their bad effects, and we cannot praise them too highly as a family medicine, for any use for which a mild physic is needed.

They are certain in their operation, and yet they are safer than any pills known.

They can always be relied on, as we shall spare no pains in maintaining their excellence, by always using strictly pure medical extracts in making these pills.

If your druggist does not have Kendall's Persian Pills in his store, do not take any other, but send direct to us, and we will forward them by return mail, postage prepaid, at the following prices:

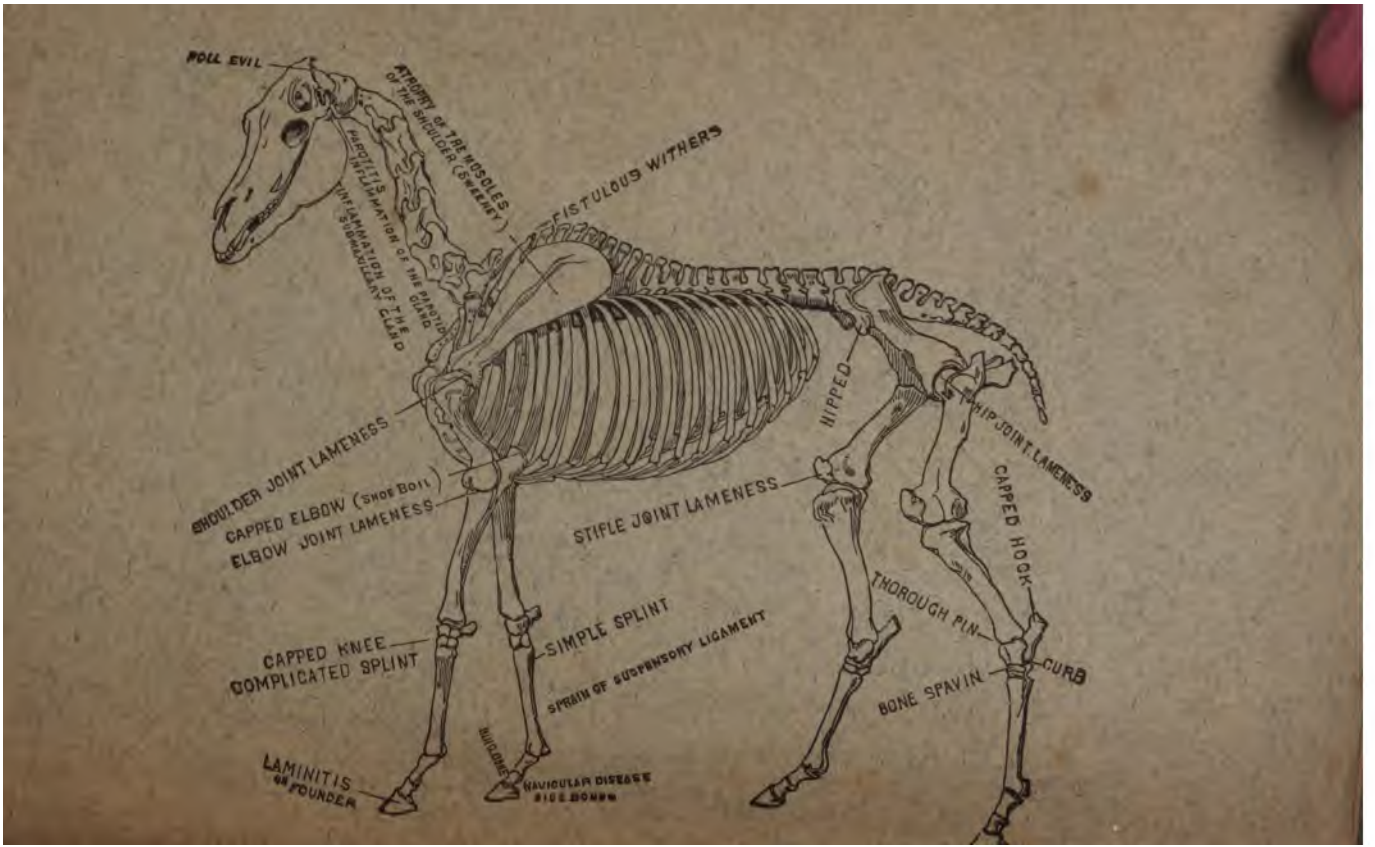
One box, twenty-five cents; five boxes, $1; twelve boxes, $2.

Sample package sent by mail to any address, on receipt of two three-cent stamps.

Address all orders to

DR. B. J. KENDALL & CO.,

Enosburgh Falls, Vt., U. S. A.


POLL EVIL
ATROPHY OF THE MUSCLES OF THE SHOULDER (SWEENY)
PAROTITIS
INFLAMMATION OF THE PAROTID GLAND
INFLAMMATION OF THE SUBMAXILLARY GLAND
FISTULOUS WITHERS
HIPPED
HIP JOINT LAMENESS
SHOULDER JOINT LAMENESS
CAPPED ELBOW (SHOE BOIL)
ELBOW JOINT LAMENESS
STIFLE JOINT LAMENESS
CAPPED HOCK
THOROUGH PIN
CURB
BONE SPAVIN
CAPPED KNEE
COMPLICATED SPLINT
SIMPLE SPLINT
SPRAIN OF SUSPENSORY LIGAMENT
RINGBONE
NAVICULAR DISEASE
SIDE BONES
LAMINITIS
OR FOUNDER

THE ABOVE IS A GOOD REPRESENTATION OF THE NEW LABORATORY AND MANUFACTORY OF B. J. KENDALL CO., ENOSBURGH FALLS, VT., PROPRIETORS OF THE CELEBRATED KENDALL'S SPAVIN CURE.

See description inside.

Photon
Pamp
Bind
Gaylord
Mak
Stockton
PAT. JAN. 2

LANE MEDICAL LIBRARY

This book should be returned on or before the date last stamped below.

MAR 16 1969

L81 Kendall, B.J.& co.
K33 The doctor at home.
1884 73655

NAME	DATE DUE
R Thomas Wheat	MAR 16 1969